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THE

NATIONAL TEACHER:

A Monthly Educational Journal.

E. E. WHITE, EDITOR.

VOLUME - - - IV.

COLUMBUS, OHIO:
E. E. WHITE, PUBLISHER.
1874.

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CONTENTS.

PAGE

Attention, How to secure. By R. T. Cross 16
American System of Education, The 21
Aristotle and Education. By W. H. Venable 51, 83
Advanced Instruction, System in. By Edward Brooks 54
Asking Questions. By R. T. Cross 59
Anti-Rod Experiment in Chicago, The 66
Advice to Young Teachers, Good. 101
Agassiz as a Teacher. By E. A. Andrews 115
Agassiz at Penikese 136
Agassiz Memorial, The 173
Art of Expression, The. By E. S. Cox 197
American School System, English Opinion of the 250
Assaults on Public Schools 254
Art Education 451
Book Notices. 33, 75, 113, 150, 189, [228, 267, 430, 466, 499
Boston School Board, Women in the 70, 110
Book Question, The. By Delia A. Lathrop 438
Catholic Position on the School Question, The 23, 137, 451
Corporal Punishment in New York 25
Compulsory Education, Dr. Ray Palmer on 64
Civil Rights Bill, The 67
Correspondence and Queries. 96, [134, 211
Children sent to School too Early 99
College Degrees and Donations in the United States 110
Catholic Utterances against Public Schools 137
Compulsory Education, D. A. Hawkins on 138
Compulsory Education in Michigan 175
Clarke's Position not Answered by Physicians, Dr 178
County School Supervision 181
Cincinnati Observatory 182
Caring for Pupils. By Ruth C. Wainright 204
Clarke's Position, Dr 216
Compulsory Education in New York 223, 495
Children's Magazines 251

PAGE

Coeducation of the Sexes 252
Children need Good Models and Examples 416
Class Intervals in Graded Grammar Schools. By H. F. Harrington 433, 471
Class Intervals 448, 489
Catholic Church and the Common Schools, The 451
Children, Rights of 490
Coeducators 491
Compulsory Education. 64, 491, 462
Colleges and Universities. 26, 72, 109, 148, 224, 320, 455, 458, 459, 462
Contributors, Names of—

E. B. Andrews 86, 115
John Bolton 14
Edward Brooks 54
R. T. Cross 16, 59, 126, 158, 241, 283, 443, 482
E. S. Cox 197
Eva V. Carlin 234
E. H. Cook 487
Adolf Doual 118, 271
D. F. DeWolf 485
Henry Ford 124
Henry H. Fick 277
W. D. Henkle 17, 92, 133, 161, 209, 247, 403
John Hancock 39
H. F. Harrington 433, 471
R. H. Holbrook 441, 479
Delia A. Lathrop 438
A. D. Mayo 1, 77, 219
Otto Meyer 20
S. P. Merrill 61
Eliza H. Morton 131, 202
T. C. Mendenhall 170, 199, 237, 401, 476
J. S. Patterson 394
W. H. Scott 153, 193
Sarah C. Sterling 164
Ell T. Tappan 90
Harry Ufford 206
W. H. Venable 51, 83
L. Van Fossen 246
W. Warren 129
M. Josephine Warren 169
Ruth C. Wainright 204
E. E. White 406
W. H. Young 7
E. S. Zevely 444

Death of Professor Agassiz, The. 26
Do Hens Set? By W. D. Henkle 92, 133
Disciplinary Value of Science ... 106
Drawing in Country Schools 176
Drawing, Suggestions on the Teaching of. By H. H. Fick ... 277
Discipline in the Chicago Schools 449, 460
Education, The True End of. By John Bolton 14
Educational Intelligence. 29, 70, 108, 144, 182, 223, 260, 318, 427, 455, 493
Education at the Vienna Exposition 63
Educational Problem, An 65
Expulsion from School 68
English the Language for Science, The. By E. B. Andrews. 86

PAGE
Every Saturday on a National University 101
Educational Institutions of Vienna 102
Education by the State 103
Educational Journals on President Eliot's Report, The.....180
Experimental Notes. By T. C. Mendenhall 199, 401, 476
Experiments in Physics.....213
Expression 213
Elmira Conflict, The.....214
Employment of Teachers 216
Education in Richmond, Va.....446
Education of Children of Different Races 450
Education and Business 453
Free High Schools in Rural Districts.....99, 249
Female Education, True and False. By H. A. M. Henderson.358
French Pronunciation, Notes on. By W. D. Henkle 403
German and American School Matters, A Comparison of. By W. H. Young..... 7
German and American Schools, Prof. Young's Comparison of.. 21
Governor Noyes's Message..... 69
German and American School Matters. By Adolf Douai.....118
Geography, Suggestions on Teaching 102
German Education, Dr. Thompson on.....140
Graphic Method, The. By T. C. Mendenhall 237
Graded School Management, Several Problems in. By E. E. White 406
Heap, A. By T. C. Mendenhall.170
High School Question, The 174
How we may Spell.....180
History, The Teaching of. By Eliza H. Morton 202
Home Instruction and Study.....252
Higher Education. By S. D. Barr286
High School Question, The. By John Hancock.....375
Hints for Young Teachers. By R. T. Cross.....443, 482
High School in a Graded System, Place of the..... 489
How to Interest Pupils 490
Inauguration of President Orton 72
Industrial Expositions in Public Schools.....139
Improving Teachers, Novel Plan for 140
Inaugural Address. By D. F. De Wolf 323

PAGE
Ill-Ventilated Schoolrooms.103, 141
Illustrative Teaching. By Wm. Watkins.....348
Interval Between Classes in Graded Schools, The. By D. F. DeWolf 485
Kindergartens in St. Louis.....185
Language Notes. By W. D. Henkle 17
Language, A Rich. By Otto Meyer..... 20
Language an Art. By A. C. Kendrick 95
Lady and Woman, Use of the Words.....174
Moral Training in the Public Schools 23, 104
Manual Labor at Cornell..... 24
Methods of Instruction, The New. By John Hancock..... 39
Mental Arithmetic..... 67
Mayo's Paper, Dr..... 99
Moral Influence of American Schools 100
McCoy's Ohio School-Book Bill.110
Manual Labor Experiment, The.141
Methods of Examination. By By W. H. Scott.....153, 193
Male and Female, Use of the Words.....173
Mental Arithmetic.....175
Men and Women needed as Teachers, Both 177, 491
Moral Education, Herbert Spencer on.....215
Model or Practice Schools 251
Mistake of Young Teachers.....416
Memorizing Prose and Verse.447, [450
National Commissioner's Report, The..... 25
Nat'l Bureau of Education..138, 214
New Methods of Education New? Are the. By W. D. Henkle...161
Normal Schools, Mr. Colfax on.177
National Educational Association 70, 104, 220, 264, 416
National Normal merged in this Journal, The.....427
Oral Instruction 62
Oral and Text-book Methods, The Union of..... 62
Ohio Supreme Court, The Late Decision of the..... 65
Ohio College Association..... 72
Ohio Constitutional Convention 182
Ohio Institutions for the Deaf and Dumb and the Blind 111
Objection to High Schools Answered, An 179, 489
Outlining. By R. H. Holbrook.479

PAGE

Other Countries....185, 188, 462, [464, 499
Ohio Teachers' Association..221, [260, 318, 323
Ohio Superintendents' Association 285
Oral Lessons, The Teacher's Preparation for. By W. W. W. 399
Public Education, Dr. Sears's Argument for 22
Preparation for the Recitation, The Teacher's 27
Pen or Pencil in First Writing Lessons. By S. P. Merrill..... 61
Paid Contributors 136
Primary Teachers, Qualifications of 137
Punishment, The Object of. By R. T. Cross 158
Primary Teacher, The. By Sarah C. Sterling 164
Phonics, The Utility of 178
Parrots or Thinkers. By Harry Ufford 206
Parents and Common Schools. By A. D. Mayo 229
Punishment, Kinds of. By R. T. Cross 241
Prayer of Agassiz. The. By Jno. G. Whittier 244
Parsing, Models for. By L. Van Fossen 246
Public Schools in the Court of the People, The 249
Physical Exercise for Students..253
Public High School, The 253
Put-in Bay Meeting, The 318
Power in our Public Schools, The Undeveloped and Undirected. By Delia A. Lathrop. 332
Personal Power of the Teacher. By James H. Fairchild 364
Points for Young Teachers, Some. By R. H. Holbrook....441
Reading Exercise, The Object of a 22
Religious Instruction in Public Schools, John Bright on 24
Religion in the Ohio Constitution 66
Recitation, The. By R. T. Cross. 126
Recitation, The—Its Objects..... 216
Rome, Pronunciation of. By W. D. Henkle 247
Salary Question, The.. 22
Sex in Education, Dr. Clarke's Book on 25, 63, 102, 178
Secret Societies in Cornell..... 26
State and Education, The 253
State and the Higher Education, The. By A. D. Mayo 77

PAGE

Sub-Districts, Too many 108
Studying out of School Hours. By Henry Ford 124
Suspension in Chicago..... 139, 460
Securing Regular Attendance, The "Banner" Plan of 141
Study Question, The 142
School Legislation 181
Schools of the Cherokee Nation. 185
School Rights of Colored Youth. 213
Schools for Wayward Children, Special 215
Self-Culture of the Teacher. By Eva V. Carlin 234
School Visitation 249
State Uniformity of Text-books. 250
School Record of Ohio for 1873..255
School Incentives 257
Sex or No Sex in Education. By Adolf Douai 271
Spelling 284
School Supervision. By C. W. Williamson 301
System of Popular Education, Relation of School Officers to a. By H. A. M. Henderson 307
Spencer on Education and Morals. By J. S. Patterson.....394
Securing Obedience thro' Love..448
Studies in our Public Schools, Increasing the Number of.....449
School Incentives, Proper. By E. H. Cook 487
Teachers' Salaries..... 64
Teachers for Examiners..... 100
Taking Notes. By E. H. Morton. 131
Teacher Question Phrenologically Solved, The 139
Transfer of Pupils, The 179
Teacher's Jurisdiction over his Pupils, The 223
Teachers and Temperance. By R. T. Cross 283
Theory vs. Practice. By E. S. Zevely 444
University Theories of Popular Education. By A. D. Mayo... 1
Uniformity Possible, Too much. 21
Voluntary Attendance. By Eli T. Tappan 90
Writing be Taught in Common Schools? How should. By W. Warren 129
Woman, Lady, and Female, The Proper Use of the Words. By M. Josephine Warren. 169
What is Slang? By W. D. Henkle. 209
What we owe to Agassiz as a Teacher 216
Women in Charge of Schools ...448
Woman's Capacity for Educat'n. 448

THE

NATIONAL TEACHER:

A MONTHLY EDUCATIONAL JOURNAL.

Vol. IV. JANUARY, 1874. No. 1.

UNIVERSITY THEORIES OF POPULAR EDUCATION.

President Eliot, of Harvard College, was appointed to report to the National Convention of Teachers, at Elmira, concerning the project for a National University. Respecting the facts and reasonings by which he assailed this plan, we have, at present, nothing to say. But, at the close of his elaborate argument, Pres. Eliot has favored the people of the United States with his own idea concerning the relation of a republican state to education in general. This portion of the address is reported in the widely circulated *Popular Science Monthly*, for October, 1873, and has attracted attention in the western and eastern press. Of this portion we propose to say a word.

It is evident that, although, upon the surface, this essay is directed against the establishment of a national university, the principles there laid down apply to state governments as well. Indeed, the learned president sums up his ideas concerning popular education in this remarkable sentence: "Let us cling fast to the genuine American method—the old Massachusetts method—in the matter of public instruction. The essential features of that system are local taxes for universal elementary education voted by the citizens themselves, local elective boards to spend the money raised by taxation and control the schools, and for the higher grades of instruction permanent endowments administered by incorporated bodies of trustees. This is the American voluntary system, in sharp contrast with the military, despotic organization of public instruction which pre-

vails in Prussia and most other states of continental Europe. Both systems have peculiar advantages, the crowning advantage of the American method being that it breeds freemen. Our ancestors well understood the principle that, to make a people free and self-reliant, it is necessary to let them take care of themselves, even if they do not take quite as good care of themselves as some superior power might."

Elsewhere the point is reiterated that the idea of the support of the higher education by the state is a logical result of the European theory of "government by Divine right", and involves the establishment of a state church. In opposition to this, he presents the conception of government as a "purely human agency, with defined powers and limited responsibilities." Out of such a government can come only what he calls the "American" or "old Massachusetts" idea of education, quoted above.

Nothing is more common, in matters relating to the civil life of the people, than the unconscious identification of scholarly theories with prevailing facts. The curious lucubrations of the university men of Europe, on matters of social and civil polity, fill libraries of forgotten volumes. We fear that the eminent scientist and administrator of Harvard has permitted his well-known positive opinions on "The Higher Education" to overcome his usual carefulness of statement in regard to the American and Massachusetts systems of popular education. It is generally understood, by those who have been associated with Pres. Eliot in educational affairs, that he is an ardent opponent of the support of any save elementary education by the state. This opinion he doubtless shares with a considerable party of university and educational men in the east and west, to say nothing of the almost universal agreement of the defunct aristocracy of the south. There always has been, and still remains, in the United States, a party of worthy, cultivated, often high-minded and eminent people, who seriously question the right and policy of our system of popular education, especially the right to tax the people for anything beyond elementary instruction. All education above this can be better supplied by institutions, academical, professional, and collegiate, endowed by private munificence and managed by private corporations. This party would abolish alike state universities, state normal, high, and professional schools. In this essay Pres. Eliot appears as the vigorous advocate of this system.

His opinion is entitled to respect, on its own merits. But when, in his eagerness to push a private, scholastic theory of education, he attempts to identify it with the actually existing or ideal American or Massachusetts system, and adroitly slides under the American republic the extreme secular theory of government obtaining in certain quarters, his assertions must be tested by the facts.

It will be "news" to the citizens of the good, old commonwealth of Massachusetts to learn what is their system of public education, from the essay of Pres. Eliot. Only one portion of his statement is correct, and that not in the sense it is evidently intended to be understood. It is true that the greater portion of the tax for elementary schools is assessed and appropriated, in towns and cities, by the local governments. But this action is not local or voluntary in the sense that any town or city can refuse to tax itself for such elementary education; on the contrary, it is done in conformity to a system of educational legislation more elaborate than that of any state of the Union.

The state of Massachusetts, by statute: 1. Compels every parent or person in charge of children between the years of 8 and 14 to give to such youth a certain amount of education, either by public or private instruction, and the refusal to comply subjects the citizen to fine and the child to arrest as a vagrant. It also controls the hours of labor for children in manufactories, and forbids their employment without certain specified instruction.

2. The state requires every town and city to keep open elementary public schools six months in a year, for the instruction of all entitled to attend, in which certain specified branches shall be taught, at an expense of at least $1.50 for each child; and requires every town of over 500 families to establish a high school ten months in the year, naming the minimum of branches to be taught. The refusal to do this brings on the town or city both a negative and a positive penalty, in the state withholding its portion of the public school funds, and a fine imposed upon the corporation.

3. This local tax is supplemented by a large state fund, divided among the towns according to the number of children of school age. Even this is not regarded as sufficient, since large numbers of the smaller towns of the state, by means of the withdrawal of capital to the manufactoring and commercial

centres, are left in a condition where an exorbitant local taxation, added to the state fund, does not suffice for good elementary education. Hence, the board of education is forcing upon the attention of the legislature a bill for a small state tax, like that in Ohio, to be distributed according to the school population. This bill was carried more than once in the popular branch of the legislature, and, last year, was prevented from becoming a law only by the votes, in the senate, of the representatives of large cities, who seem to agree with Pres. Eliot in the idea that the little towns shall have only such education as they can pay for. The vote of the Boston members was almost unanimously given against this just measure; and this fact, in connection with the decision of her late mayor, that the modern Athens has no legal right to establish a city normal school, seems to indicate that Pres. Eliot's theory is, at best, a "Boston notion", not in any sense an "old Massachusetts" or "American" idea.

4. But, beyond this compulsory support of elementary and high-school instruction, the state has established four normal schools and is about to open the fifth, besides supporting a generous system of school institutes. It also endows academies and institutions for the promotion of science and the arts, and has ordered a general system of instruction in drawing. It has assisted almost every college in the state. Under a distinct provision of the constitution, it has expended large sums of money in the past, and still expends for objects far beyond elementary education. Harvard College was a state university until recently, and it doubtless owes greatly to the prestige of that position the munificent private donations that have enabled it to cut loose from state aid, and have encouraged its president to assail the whole idea of state help of the higher education as an odious, European, and "obsolescent" error.

So the opinion of Pres. Eliot concerning the true basis of popular education in a republic, is certainly not the idea of the Massachusetts of to-day. If it is the "*old* Massachusetts" idea, it is older than the establishment of Harvard University by the state in 1636! There is not a state in the world that more completely repudiates this wild university notion of popular education than the state of Pres. Eliot's birth and residence. Neither is it the "American idea" in any other sense than this: that it has always been the theory of those states in the Union which virtually repudiated their duty to educate the

masses till they were made "republican states" by the sword. The people of Ohio recognize in this ambitious theory of popular education the old notion of the southern statesmen and scholars, that the masses should be left to the mercies of local, "voluntary" public opinion for public instruction. The results of this idea are sufficiently lamentable anywhere; but in half the Union to-day the only hope of the most meagre elementary education is in the state, the localities where this is most needed being the very places where it can not be obtained. When to the ordinary difficulties of such a loose system, are added the prejudices of nationality and color, and the deadly hostility of the priesthood of at least one great religious sect to all public education, it is easily seen what would become of America, if left to this college recipe for "breeding freemen." For President Eliot's opinion, that "*it does not follow that an educated and intelligent people will be republican*", is not the opinion of that portion of the people who fought through the great rebellion to keep the United States a republic.

Neither should we fare better if we tested Pres. Eliot's opinions concerning the foundation of government, by the facts of American life. If by a republican government being a "purely human agency", Pres. Eliot simply means that such a government protects all forms of religion consistent with public morality, is not connected with the church, and repudiates the "divine right" of any class of men to rule the people, he only announces a truism. But if he means that the American republic is a "purely human agency" in the sense that it confesses to no dependence on God for its existence, and on His providence for protection, and does not hold itself bound to base all its legislation on that Christian ideal of morality which is the public opinion of Christendom, he finds no warrant for such a fancy in the state or national governments. The state of Massachusetts, in this very matter, supports the higher education on the ground that "the encouragement of the arts and sciences, and all good literature *tends to the honor of God, the advantage of the Christian religion, and the great benefit of this and the other United States of America.*" Again and again, she repudiates, in her organic law, the low, secular, academical estimate of goverment here put forth as the "American idea." Every state, save two or three, makes a similar formal acknowledgment of the divine origin of government, in its organic law.

The United States Goverment, fashioned by the men who, in

the Declaration of Independence, declare all natural rights an endowment of man by God, has always been theoretically administered in the interest of a Christian civilization.

We are aware that in this extreme secular theory of government, Pres. Eliot is sustained by a party in this country, in which may be found some men eminent for legal and scholastic attainments. But whatever may be the nature of this theory, it is not the Massachusetts and American idea of a republican state. Indeed, the people of the United States, without troubling themselves about the theories of scholars and lawyers, have always assumed the "divine right" to establish and maintain republican institutions at all hazards. They sever the church from the state the better to promote that common, Catholic, practical Chistian religion which is the basis of all public morality as we understand it. They repudiate the divine right of kings and aristocracies, but assume the divine right of the people to establish and perpetuate a government to protect the God-given natural rights of men. And it will be strange if, after destroying half a million of men, spending billions of dollars and overturning society itself in fifteen states to establish republican government, the people should be quibbled out of their right and duty to educate the masses into that intelligence needful to perpetuate the national life, by theories like these. This ultra-secular theory of the state is not the American idea. It is the theory of the European atheistic democracy; also of a considerable body of secular philosophers and scientific students, at home and abroad. It has been adopted by a few popular preachers and theologians, caught at by a portion of the press, elaborated in certain "stump speeches", appended to a brace of judicial decisions in Ohio, and ventilated in the "radical club." But no American or other state was ever founded in such a bottomless social abyss; and when this becomes the American idea, in the sense that the people of the United States act in public logically therefrom, a good many things besides will happen which few of its present advocates seem to contemplate.

So the argument of Pres. Eliot fails of the powerful backing of "Old Massachusetts" and the American Republic. In another article we may inspect its truth and wisdom as applied to the problem of popular education in America.

Springfield, Mass. A. D. Mayo.

A COMPARISON OF GERMAN AND AMERICAN SCHOOL MATTERS.

Having furnished for the previous volume of this journal a series of papers setting forth many facts, with little comment, concerning German elementary school matters, a much clearer view of the relative merits and demerits of the German and American systems and practice will now be afforded to American teachers in general, by a comparative summary of what pertains to the subject; for in nothing is one more likely to be mistaken than in judging general systems and their results from here-and-there glimpses of particular facts.

German common-school houses, especially out of the cities, are generally better than the American school buildings of the same class; as the schoolrooms are always a part of the house in which the headmaster resides, and this house is generally among the most respectable in the town or village. The head-teacher, ranking socially next to the pastor, and being furnished with a residence accordingly, he is of course responsible to the community and the authorities for the condition in which his residence, including the schoolrooms, is kept; and, besides, as a man of culture and taste, he has a personal and family interest in having things about him as pleasing and agreeable as possible. Hence the schoolroom is generally as well built, finished (though plainly), and kept, with due regard to necessary differences, as any other rooms in the vicinity. Broken windows and window shutters, defaced walls, untidy surroundings, etc., are seldom met with. Flowers and shrubbery are generally found and are kept in good order. This is certainly better than in America, and is impossible in America until teaching shall more generally become one's life-calling, the teacher be regarded a permanent resident of the community, and the community itself be educated to see its interest in preserving and making school property attractive by securing in it the residence of an honored and cultivated family.

While there are rarely found in Germany so fine city common-school buildings, as Germans are not rich and seldom go in for display, the average of city-school buidings are quite as substantial and fit for their purposes as in the United States. In these, as in the village-school buildings, the superintendent or headmaster always has his residence, while the servants who

take charge of the building are either members of his household, as in the villages, or immediately subject to his orders.

In fine maps, charts, school apparatus, etc., the German schools are generally behind American schools of the same class; but every German school has its cheap maps, its simple apparatus, including globe, counting frame, block-letters for word-building, natural history charts, etc., and makes vastly more use of them than is done in America.

In school furniture German village schools are better provided than similar schools in America, while almost no German city school has such fine furnishings as are now quite common in American cities.

In Germany a handsome common-school play-ground, enclosed and ornamented, is never seen. Boys commonly play in the streets and girls in little courts where they are crowded thick as bees.

German school books are immensely inferior to American. True, German children make use of *less* books in numbers, but *more* use of the few they have, than American, and this may be a good reason why the books they do have, should be well gotten up—on good paper, in good type, and well bound. The reverse is discreditably true. The common-school books are mostly wretched affairs,—a fact which shows itself painfully in the throngs of spectacled people that swarm the land. As to the contents of these books, they could scarcely command the respect, much less the confidence, of American teachers as suitable for American school work; but it must be remembered that German educational leaders would perhaps have as little respect for American school-book helps and methods; for they expect teachers to be *educators* in the etymological sense of this term, and not simply guides and overseers of school-book studying.

Every German teacher must be a person of considerable breadth and some depth of culture, and in most states must have a special normal-school training. Young misses and men of sixteen to eighteen years of age whose advantages had been limited to winter schools, and perhaps a year or two at a high school or seminary under teachers themselves often youthful and unskillful, could never get into a German public school, no matter how great the demand for teachers; and could they do so, the profession would inevitably drop suddenly down from the social and civil eminence now accorded it. At the same

time many such American teachers, by their superior quickness, energy, and enterprise, soon attain a higher success as teachers than the more professionally prepared Germans. This, however, is rather to the credit of the national character than to our practice of qualifying and certificating nearly every body who comes as a public-school teacher.

Teaching, as everything else, is less well paid in Germany than in America—about $250 per annum, being pretty good pay for a head-teacher in a town or village school, while the subordinates receive much less and, and teachers in city schools not much more. In the former schools, however, house rent is given the teachers in the shape of a dwelling for married and a room or two for single teachers in the public-school house. With this latter are always connected conveniences for cow, pig, poultry, and a kitchen garden. Besides the teacher has, in Germany, a professional consideration and a social rank that Germans value—and I say it to their credit—more than dollars.

In regard to educational control and supervision, the less democratic and more centralized systems of Government prevailing in Europe, have their effect in many ways on school matters. Nearly all officials with executive functions hold their position by appointment from above and during good behavior, and they are generally clothed with quite large powers subject, of course, to revision by higher authorities and in the end by state ministries, who are directly answerable to the law and the chief executive. Such is the whole structure of the German state educational systems. The Superior School Council determines, under the law, the places of building, remodeling, furnishing, and taking care of all school property, furnishing plans, specifications, directions, etc., therefor, and thus securing great uniformity, generally the best attainable results and avoiding abuses, growing out of local prejudice, incompetence or unfaithfulness.

The same considerations apply with equal force and better results to the preparation, qualification, selection, and appointment of teachers,—every teacher getting his commission from the state council,—to the determining and arranging of school programmes, to the preparation or selection of school books, determining the course of study and general methods of instruction, and to fixing and directing all examinations, promotions, etc. The effect of this uniformity, coupled with the fact of indefinite terms of office of most school officials, is seen in

the striking familiarity which all concerned have with the educational duties devolving upon them. There is doubtless in it a great deal of routine that seems soulless and lifeless to the sprightly American, but there are no blunders, no foolish experiments, and little room for abuses. If there are no rare exhibitions of the new and startling, there are no communities suffering from ill-directed empiricisms. If nothing new is found out, the *good old* way is sure to be practiced. Any general improvements must depend mainly upon the progressiveness of the men at the head. Fortunately German educational leaders are progressive men.

Again, these governmental systems of Europe afford an educational advantage in the matter of appointments of school officials. Every man from the president of the Superior School Council down to the humblest village burgomaster getting his appointment and commendation from above and being independent of his official equals and those below him in rank, unless he lay himself liable to charges of maladministration or neglect of duty, has nothing to fear and everything to hope, in his official character, from fidelity and competency in his office. In such a system little goes by favor, and merit generally gets its own. It might not be so much so where officers are ever changing, and hence little valued; but in Germany even small rank and title are so great affairs, that their possession is greatly coveted and tenaciously held. As remarked above progress again must be slow, but it is certainly constant. There is nothing retrograde, and *general* results are gratifying.

In the matter of school work, it may be remarked generally and will be understood from the foregoing, that a striking uniformity prevails. Remembering that school attendance is compulsory, that every child enters at seven and remains eight years at school without intermission, it will be seen that under this system all children in the land of the same age will be learning the same things, in the same order, by the same or very similar methods, and with precisely the same ends in view. There is no question that these "same things", by very reason of the sameness all around, are pretty well taught. *But almost nothing more* is taught, and there is accordingly little aspirations, expectation, or possibility of learning anything else. For instance, in the state of Baden every common school child can draw about so much, can write about so well (which is very

good) knows German geography pretty well, his home geography quite minutely; he can do the ready reckoning of a small tradesman, understands pretty fairly the facts of local natural history and philosophy, has a fair insight into the local life near about him, and has a memoriter knowledge of the Bible, catechism, and hymn book, etc. For every child and of course every man and woman to know this much is undoubtedly a result rarely attained out of Germany, but it is attained at some cost. Not entirely because the system is bad, but partly because the means are limited. For instance, with few teachers and these poorly paid to bring an entire population to a certain standard, the standard itself must be rather low. To bring all to this standard almost necessarily involves taking none beyond it. In point of fact, the latter seems to be the actual result. The whole system being planned and worked in adaptation to this standard, there is no margin of men, means, or time for going beyond it. Certain manifest objections to the graded school system here find their fullest expression. No matter what the gifts, tastes, or peculiarities of a German common-school pupil, there is just one thing for him to do, no less and no more, and that one thing is the average of all the other common-school children in the state. All is so moulded into form and grooved into routine, that no German common-school child or its parents have the thought, or would think it possible to go a little deeper or gather a little more widely in its field of study. Taking a higher course in arithmetic or dipping into algebra or making a beginning in Latin, as is often done in an American six months' school, is never dreamed of here.

Perhaps the mere absence of this thing in Germany, or its practice in America, may not signify much in the aggregate amount of knowledge lost or gained; but the *difference of stimulus* general in one case, and impossible in the other, must have an effect upon the two peoples that any thinking person will at once appreciate if he can not estimate it. I believe that German common-school children, taught from the start to look to fourteen as the closing year of their school life, and to look forward to some calling for which such a school training may be fit, having contact only with schoolmates similarly impressed, and leaving school at the age of fourteen because of no provision to remain longer, rarely have aspirations beyond the callings that such a school life suggests. How different in the American ungraded school, where every urchin looks with ad-

miration on the big boy of eighteen or twenty who has been through two or three arithmetics, and who does not fail to impress the youngsters that he and they may go far beyond the common! And what American teacher, except the consciously incompetent girl or slothful man, is not daily filling his common-school pupils with the same idea? True, every American boy may think of being President, while no German one hopes to be Emperor—and this has its effect. True, again, there is great permanence in all German stations, callings, etc., while in America everything is in constant change—and this, too, has its effect;—but there can be no doubt that the routine common-school work of the Germans, aiming at one unvarying result by an unvarying series of unvarying processes, has a far greater effect in keeping the masses on a comparatively low level and perpetuating the striking distinction between them and the cultivated classes; for, with all their common-school education, they are but a mass to be led by the few. Had the plan been devised to give the people such education as would make them easy to be ruled, instead of fit for ruling, the device could scarcely have been better.

Lest what is last written should not seem to harmonize with the provisions made for higher education of boys, it should be here stated that these higher schools are rarely arranged in Germany as in America, for the passing up of children from the lowest common to the highest high school grade; but a German high school takes the boy from his earliest school years and *starts him as a high school pupil*, while the boys who start in the *common schools expect to go through them and stop there.* The high schools are very rarely free and often quite expensive, so that in a country where the poor are quite poor, none but those of pretty fair means, comparatively, think of starting their children in the high-school course. True, a transfer may be made from a common school to a high school; but not easily, for the courses are different almost from the first year, so that in fact such a transfer rarely occurs.

As to subjects of common school study, the drawing, geometry, natural history, and history in German schools generally go, I think, for more than they are worth with many Americans, in their comparisons of the systems in the two countries. Aside from a strong conviction that drawing is in great danger of becoming the next American school hobby, I must say that, while the geometry, natural history, history and philosophy of

the German common schools are not to be disparaged in themselves, they are so elementary in their amount and so simply taught that neither the information nor discipline gained is particularly noteworthy; while the superior quickness of American children, both to see and to learn, with the great amount of family newspaper and other reading, and family discussion of all sorts of topics, so prevalent in America and so rare among the German masses, leaves the American child at no final disadvantage when compared with the German. This is not meant to imply that the German common schools are not superior to the American in the last named particular, but we have enough compensation not to be greatly dissatisfied if we are sometime yet in working up these particular points in the schools. For one, I should be greatly surprised to find that American common-school pupils in arriving at the age of twenty, do not know vastly more of these very things than Germans of the same age, who have learned them in common schools.

Much is sometimes made of needle work by German school girls and gymnastic training by the boys. The subject is really worthy of more attention in America from an educational point of view, but as to practical results the girl learns mostly those things that American inventive genius has rendered comparatively unprofitable, and the boys' gymnastic training in the common school is little more than first lessons in the "school of the soldier", which a boy under fourteen never needs and which is of little worth after. To be sure, in the higher schools, where older boys study, study harder and are in danger of neglecting exercise, the German gymnastic training is most valuable, and can not too soon be introduced in American schools of similar grades.

The subject of religious instruction in the German schools has been too recently discussed (in the last number of this journal) to require notice here.

To sum all up, the longer experience of the Germans, kept up under far more arbitrary regulations than we should expect, has developed some results of which we in America may well take note, if we do not aim to achieve them; but all is so mixed up with systems of government, habits of life, and national peculiarities, that, without the utmost caution and judgment, and a knowledge of the bearings involved, we should make many mistakes in attempting to graft much that is German upon our

educational system. Valuable hints now and then we may take up and profitably use, but the longer I look at these old-country institutions the more am I convinced that out of her own genius America must work the problem of her success in education as in everything else.

Carlsruhe, Oct., 1873. WM. H. YOUNG.

THE TRUE END OF EDUCATION.

"The end desired must be known before the way. All means or arts of education will be, in the first instance, determined by the ideal or archetype we entertain of it."—RICHTER.

All rational inquiries as to means and methods must begin by a careful and correct determination of the end to be accomplished. No one would provide himself with tools and devise methods for their use without first determining in his own mind what he wishes to accomplish. Before he purchases plows, harrows, rakes, etc., he must have made up his mind to farm, else how could he have selected so many instrumentalities to one end. Without this end in view, he might have selected, just as readily, canvas, paints, brushes, or any other of the thousand different instruments to be found in the market.

But he must not only have a general idea of the end, farming, that he may be able to make a general selection of instruments, he must have a clear idea of successful farming in all its minute details in order that he may the more wisely select the farming implements best suited, or adopt the best methods of using them. All discussion, therefore, as to the instrumentalities and methods of farming, would be clearly out of place without first determining, in some degree, what good farming is.

Thus it should be in the work of the teacher. Before we can reasonably expect to arrive at just conclusions as to the best methods of teaching, we must form a clear, distinct idea of that state or condition of mind called education. When an intelligent mind has clearly set before it a certain definite work to be done, methods will readily be suggested for its accomplishment; while the best devised methods in the hands of a teacher, unenlightened as to the true end to be attained, may prove more disastrous than irrational or absurd methods. Under such cir-

cumstances the culture for virtue would result in hypocrisy; formality would assume the place of morality; for taste we should find sentimentality; and in the place of the humility and vigor of true mental training, we should have the affectation and imbecility of intellectual obesity.

Different ends would require the adoption of different methods. Is the ease of the teacher the end to be attained? Supply him with text-books having question and answer ready made out, to be "learned by heart" and recited to the teacher, who has nothing to do but to see that the pupil has given the exact words of the book. Is the end to be immediate and striking results, which will show off well at made-up examinations, and redound to the reputation of the teacher, or more especially to the pecuniary rewards of that reputation? Methods must be suited to these ends,—methods which will most successfully arouse a short-lived ambition, and cultivate memory to enormous disproportions at the expense of all other powers of the mind, moral and intellectual. Is it so to prepare the mind that it shall through all its future course be a zealous and successful seeker after the true, the beautiful, and the good? Far different methods from those just enumerated, or perhaps from any now in common use must be devised to make these happy results the *rule* and not the *exceptions* in our teaching.

The determination of the true end in education would lead to a unity of effort, not only in the work of different teachers, but in that of each individual teacher. The teacher who has not formed for himself that ideal of what true education must be, works to-day towards one end, and perhaps to-morrow toward an opposite end,—undoing one day what may have been well done the day before. He comes before his school with his bundles of "orders" and "counter-orders"—not indeed in separate bundles, for his utter want of an end precludes the idea of so much system;—setting his scholars adrift hither and thither, backward and forward, making progress in no one direction. Under such treatment, no wonder if pupils should present a strange mental and moral patch-work of good tendencies and bad tendencies; of contradictory or discordant habits, or of no habits at all; of right inclinations, and no habits of thought or of life concurring with those inclinations; of a wild and desolating scene of resolution and of irresolution; of towering ambition and greed of gain, mingled with fitful feelings of rev-

erence for the truths of religion and short-lived longings to be governed by its divine precepts.

The true teacher, on the other hand, will form for himself a clear conception of that state of mind called education as it lies in the remoteness of the manhood and womanhood of the pupils under his charge. He will reject the use of every motive, however efficacious, if its ultimate tendencies be to mar the end he has in view. He will discard all present and striking results, however flattering those results might, for the present, be to himself, should their unseasonableness destroy the vitality that is necessary to the healthy growth of fruit in after years. His efforts are all in harmony with the end he has in view. Every question he asks, every subject and object he presents for mental or moral activity, every precept he utters, every example of his life has for its object the realization of his conception—"the development in due order and proportion of all that is good and desirable in human nature."

But these ideals of the ends of teaching may never be realized in practice. Neither may the ideal of beauty in the mind of the painter be realized by himself upon canvas; nor can the mechanician's ideal of a steam engine, utilizing all the wonderful amount of power locked up in a bushel of coal, be realized in this world of friction and waste of power; but this will not deter the painter or the mechanician from keeping those ideals steadily in view, whilst they are bending all their energies to the nearer approach to the realization of those ideals. So let it be with the teacher's work.

Cleveland, Ohio. J. B.

HOW TO SECURE ATTENTION.

The teacher should aim to secure the constant attention of every member of the class. The whole class should be constantly at work, thinking or giving expression to thought. The one who secures this result, other things being equal, is the successful teacher. How can it be done? Not by rules, nor by force, nor by devices even, though these will help. The teacher must strive to secure a real interest on the part of the pupils by having and manifesting a real interest in the subject himself. If he has not this interest, he will fail. If he has it, the following suggestions will help him:

1. Let it be distinctly understood that you will repeat no question, unless it be a long and intricate one, after you have asked it once clearly and distinctly. If a pupil says, "I don't know what the question is", give him a failure, and pass on. Ask the question but once, even though it go around the whole class. Persevere in this, and it will teach each pupil to notice carefully all the questions that are asked.

2. Do not go through the class in regular order, but call upon pupils irregularly, skipping about from one to the other, sometimes calling upon the same person two or three times before you get around the class. Let each one feel that he may be called upon at any time. This will keep them attentive. If you see a pupil whispering, or inattentive, or looking around the room, fire a question at him. Ask him if the answer just given by some one else was correct, or ask him to give it. He will avoid inattention, if he knows that it will surely bring a question to him.

3. Ask the question before you indicate who is to answer it. This can not always be done, but it can in most cases. If you call on a pupil first, and then ask the question, the others are at ease until that question is answered. But if you ask the question, and then wait a moment before calling on any one, each pupil will be thinking of the answer, not knowing but that he may be called on to answer it. If you pursue this course, the one called on must be expected to answer without any hesitation.

4. After a pupil has recited, call on the class, in a proper way, to criticise him. This will make him recite carefully, and will keep the class on the lookout for mistakes. Those who have a correction to make, should indicate their desire to do so by raising a hand.

R. T. Cross.

LANGUAGE NOTES.

1. *Ailantus.* *Ailanto* is said to be a Sanskrit word meaning *tree of heaven,* and is the name in the Spice Islands of one species of ailantus. The common spelling, *ailanthus,* suggests a reference to the Greek word *anthos,* a flower. Loudon, the editor of Encyclopædia of Trees and Shrubs, declares *ailanthus* to be in-

correct, in which declaration he is followed by both Webster and Worcester.

2. *Brand-new.* This word is often corrupted into *bran-new.* The metaphor *brand-new* is either from the trade-mark newly branded (*i. e.*, burnt), or from metal just from the forge.

3. *Molasses.* We sometimes hear persons say "those molasses", as if *molasses* were a plural noun. *Molasses* is a "mass-noun" in the singular number, and hence requires a singular verb (Ure says "molasses *is*"), and *this* and *that* and not *these* and *those.* The word is traceable to the Latin root *mel*, honey, and hence the spelling *melasses*, used by James Grainger in his poem entitled "Sugar Cane", 1764, and by Bryan Edwards in his "History of the British Colonies in the West Indies", 1793, is more in accordance with its etymology than is *molasses.* This remark is equally true if the root of the word is, as has been suggested, from the Greek *melas*, black. In a recent work on Derivations, published by Wm. Collins, Sons, & Co., London, 1872, the word is incorrectly pronounced *mō-las'ēs.* The sound of *e* is obscure, and not *ē* long.

4. *Pall-mall.* This is the name of a street in the west end of London. The name is derived from the game *pall-mall.* There was a walk in St. James called mall (pronounced *măl* and popularly *měl*) where the game of *pall-mall* (pronounced pěl-mèl by Walker, Smart, Webster, Worcester, etc.), which consisted in driving a *pall*, that is a wooden ball, with a *mall*, or mallet, through a ring or arch at the end of a walk. Walker, in alluding to the anomalous pronunciation měl for mall, says, "A street parallel to this walk [the *mall* in St. James's Park] is spelt *Pall Mall*, and pronounced *pell-mell*, which confounds its origin with the French adverb *pêle mêle.*" Some say that the street was so named because the game was formerly played in it. Ash, Johnson, and Latham write it *Pallmall*, Johnson marking no accent, and the other two accenting the first syllable. They give no other clew as to its pronunciation. The usual etymology is from the Latin words *pila*, ball, and *malleus*, a mallet; but Bailey, writing the word *Pell-Mell*, derives it from *pellere malleo*, to drive with a mallet.

I find the following entries in Pepys's Diary:

1681. "April 2. To St. James's Park, where I saw the Duke of York playing at Pelemele, the first time I ever saw the sport,'.

1663. May "15th. I walked in Parke, discoursing with the keeper of

the Pell Mell, who was sweeping of it, who told me of what the earth is mixed that do floor the Mall, and that over all there is [*sic*] cockle-shells powdered, and spread to keep it fast; which, however, in dry weather, turns to dust and deads the ball."

1663–4. Jan. "4th. * * * Afterwards to St. James's Park, seeing people play at Pell Mell; where it pleased me mightily to hear a gallant, lately come from France, swear at one of his companions for suffering his man (a spruce blade) to be so saucy as to strike a ball while his master was playing on the Mall."

5. *Isinglass.* This is a word often popularly applied to the laminæ of mica, a mineral so named from the Latin *micare*, to shine. Isinglass proper is, according to Sir J. Hill's *Materia Medica*, "a tough, firm, and light substance, of a whitish colour, and in some degree transparent, much resembling glue. The fish from which *isinglass* is prepared, is one of the cartilaginous kind: it grows to eighteen and twenty feet in length, and greatly resembles the sturgeon. It is frequent in the Danube, the Boristhenes [Dnieper], the Volga, and the larger rivers of Europe. From the intestines of this fish the *isinglass* is prepared by boiling."

The following is from the 12th volume of the *Encyclopædia Britannica*, *p.* 628:

"ISINGLASS, a variety of gelatine, sometimes called *ichthyocalla*, or fish-glue (ICHTHUS, *a fish*, and KOLLA, *glue*), prepared from the air-bag, swimming-bladder, or sound of various fishes. The Russian and Siberian isinglass is most esteemed; it is chiefly obtained from a family of cartilaginous fishes of the genus *Acipenser*. The swimming-bladder is cut up, washed, and then exposed to the air, with the inner silvery membrane upwards. When dry, this membrane is removed by beating and rubbing; the sound is then prepared in various ways."

The remaining part of the article, which was written by Charles Tomlinson, author of the Cyclopædia of Useful Arts, contains many interesting details. Three additional sentences are selected:

"With milk and sugar it is used as a diet for invalids, and it is also used in the preparation of blanc-mange, jellies, and creams, for enriching soups, and sauces."

"The great consumer of isinglass is the brewer, who uses it as a fining material, for which purpose lump isinglass is chiefly used."

"Isinglass forms the adhesive material in court-plaister [*sic*], for which purpose a solution of isinglass, mixed with tincture of benzoin, is brushed over black sarsenet."

The word is generally derived from the German *hausenblase*, *hausen* being the name of a fish of the genus sturgeon, and

blase, a bladder. The corrupt pronunciation of *hausenblase* is very similar to the pronunciation of the word *isinglass*, which orthography originated in a mistaken reference to the word glass. Webster's reference of the word to *iceglass* is wrong, because an afterthought is not an etymology. This afterthought gives no reasonable account of the first two syllables *isin*. Wedgwood adopts the etymology "*hausenblas*", and adds, "by us corruptly called *isinglass*, probably from connecting the name with the employment of the substance in *icing* or making jellies." This conjecture is certainly inadmissible.

Salem, Ohio. W. D. HENKLE.

A RICH LANGUAGE.

The great dictionary of the German language by the brothers Grimm, makes visible progress in spite of immense difficulties. This gigantic work, when finished, will be an evidence of the richness of the German language.

Renan, in his history of the Semitic languages, observes that the Old Testament contains only 5,642 different words. Max Muller, a German, formerly professor in England, now in Strasburg, Germany, a celebrated linguist, is of opinion that an Englishman of fine education, who was visiting public schools and university, who is reading the Bible, Shakespeare, the London Times, and besides many novels, needs in conversation scarcely more than 3,000 different words. The completest English dictionaries contain no more than 20,000 different words. [Is this true?]

Shakespeare has written all his works with no more than 15,000 different words. Milton's works contain only 8,000; those of Luther, 11,000 to 12,000.

The German dictionary of the brothers Grimm contains now already 105,000 different words, and, when finished, will contain about 500,000. OTTO MEYER.

——THE end and aim of education is the emancipation of the youth. It strives to make him self-dependent, and as soon as he has become so, it wishes to retire and leave him to the sole responsibility of his actions.—DR. KARL ROSENKRANZ.

EDITORIAL DEPARTMENT.

—— Dr. Mayo effectually disposes of President Eliot's assumption that the limitation of the state's provision for education to elementary schools, supported by local taxes voted by the citizens, is "the genuine American method—the old Massachusetts method." He convincingly shows that this is not the Massachusetts method, new or old. It is certainly not the American method, and Dr. Mayo's reference to the Southern States is not necessary, since "universal elementary education" was no more their former policy than higher education. Several of these states encouraged and aided higher institutions, and Virginia, Georgia, Alabama, and one or two others, have state universities. President Eliot must know that common schools are supported exclusively by local taxes in very few states, and in fewer are these taxes voted by the citizens. In nearly all of the states school taxes are assessed by school boards under and by the authority of the state, and only taxes in excess of the limit fixed by state law are voted by the citizens. In most of the states local taxes for school purposes are supplemented by a state appropriation, derived from a state tax and a permanent school fund. In all the states, with few exceptions, high schools are supported from the same funds and in the same manner as the lower elementary schools. Nearly every state supports one or more normal schools, and a considerable number have state universities. The genuine American method conjoins the family, the community, and the state in the support and control of public education.

—— We have never read a more satisfactory comparison of the German and American systems of public schools than the one made by Prof. Young in this number. It is based on a familiar acquaintance not only with both school systems, but with the political institutions and the social and industrial habits and characteristics of the two nations. Too many writers on German schools overlook their intimate connection with the character of the government and the people, and hence they jump to the absurd conclusion that the system which produces good results in Germany, will work well in the United States. It is evident that the monarchical system of school control and supervision, which is the life of the German system, is not at all adapted to free institutions. We commend Prof. Young's closing paragraph to the thoughtful consideration of every one interested in the improvement of American schools.

—— We are not surprised that Prof. Young sees disadvantages as well as advantages in the striking uniformity that prevails in German schools —a system "aiming at one unvarying result by an unvarying series of unvarying processes." We hope that the advocates of "state uniformity"

in school instruction and management will weigh his suggestive comments on this feature of the German system. It is clear that such a cast-iron scheme can only be adapted to children whose stations and callings in life are predetermined and grooved. It levels *down* as well as up, and secures its uniform average of attainment by a fearful sacrifice of ability and opportunity on the part of the more capable pupils, and of inventive ability and skill on the part of true teachers. The character of German text-books is an indication of what may be expected in this country when state authorities prepare and prescribe the books to be used in the schools. One of the important problems in American education is to secure *necessary* uniformity without reducing teachers to operatives, and without sacrificing pupils to the mechanism of an inflexible system.

—— We clipped the following paragraph from one of our newspaper exchanges, but can not give the proper credit:

"The object of reading to one's self is to take the sense of what is written; the object of reading to another is to express the sense. To express the sense we must first take it; hence the great importance of oral reading in the schools; its primary object being the expression of the sense, it presents the natural occasion for taking the sense. In teaching oral reading, let the pupil's mind be occupied simply with expressing the sense; let nothing be introduced into the reading exercise which shall tend to exclude thoughts of expression. This is the soul of reading; to secure facility in this should be the object of every lesson, from the first given in the primary to the last given in the professional school.

Is this advice correct? While "taking" and expressing the sense may be the chief object of the recitation, should they be made the exclusive object? May not the reading exercise be used to impart much incidental instruction of as great value as oral expression?

——The proposed action of the board of education of New York City fixing the salary of male principals at $3,000 and that of female principals at $2,000, has been very generally condemned by the press, but *Appleton's Journal* boldly asserts that if fully competent principals for the girls' grammar schools can be employed for $2,000, the board has no right, legally or morally, to pay more. It maintains that *competition* is a controlling factor in determining wages; that women are paid less than men simply because they compete for work at lower wages. It further declares that the board has no right "to fill places at three thousand dollars which can be equally well filled at two thousand"; that if women are as competent as men, they should be selected for the places now occupied by men. The *Journal's* position is too strong to be met in a brief paragraph, and we shall not make the attempt. Suffice it to add, that it does not recognize all the important facts involved.

—— Dr. Sear's address before the State Teachers' Association of Tennessee, at the recent meeting in Nashville, was an able plea for public education. He argued that since man is an intelligent being, he is the subject of culture, and without this culture he loses his significance. The right to this culture is universal, there being no reason for the education

of one human being, which does not apply to every other human being. It is of vital consequence to society that all be educated, and hence universal education is the great problem to be solved. He pointed out the weakness of the voluntary or private-school system, and showed that the demand for education could only be met by an efficient public-school system. He demonstrated the economy of public education, and fully answered the question, "Will it pay?" It is fortunate that the Peabody Fund is entrusted to the direction of so earnest and intelligent an advocate of public schools.

—— In a recent contribution to the *Independent*, Mayor Kelly, of Richmond, Va., a Roman Catholic layman, assures his Protestant fellow-citizens that there are hundreds of thousands of his fellow Catholics "who gratefully remember the public school as the source of whatever education they or their children possess", and whose opinions, as well as his own, he formulates when he says that "the imparting of sound, useful, and exclusively secular knowledge by teachers of suitable acquirements, skill, and character, chosen immediately by the people and paid for out of the public treasury, is, under the conditions prevailing in the United States, a wise, beneficent, and just system, and impugns no right of conscience." In support of this position he states that Catholics have never raised the banner of hostility to the public schools at the polls [Is this true?]; that in the Legislature of Virginia "Catholic votes have aided in the extension and perfection of the school law; that in every large city in the country pious Catholics have gladly given their services as members of the boards of trustees; that Catholic teachers have in every State sought and received employment in the free schools; and that Catholic children by thousands are now and many years have been the glad and uncontaminated recipients of their advantages." We believe that Mayor Kelly does express the views of thousands of intelligent Catholics, and we believe further that if Catholic parents were free to act in accordance with their own judgment, few Catholic children would be deprived of the advantages of a public education. The recent utterance of a prominent Catholic priest in New York City in favor of the public schools and the announcement by a Catholic Bishop in Brooklyn that provision has been made for the religious instruction on Saturday of Catholic children who attend public schools, are facts which show that the Catholic clergy are not all united in opposition to the system. It is, however, unquestionably true that the great majority of Catholic ecclesiastics in this country are hostile to the public-school system, and that in this they faithfully represent the Pope. The pronounced policy of the Catholic Church is the education of all Catholic children in Catholic schools.

—— In the paper referred to above, Mayor Kelly intimates that the public school is devoid of moral training,—that the Catholic school has "the added grace of a moral training." If this intimation is true, the public-school system is unworthy of the commendation which he be-

stows upon it. Is it true? We admit that there may be and, indeed, that there are public schools which exert very little moral influence, but this is not necessarily the case. The moral training of the public school may be and should be as effective as that of any school, and this may be true without any resort to sectarian religious instruction. We have known scores of public schools whose moral influence was so positive and vital that the conscience of every pupil was quickened and strengthened. We have known many denominational private schools whose moral influence was far less obvious and controlling. What is needed to make any school a means of moral training is a conscientious, competent teacher, who makes the moral improvement of his pupils his chief aim and duty.

—— In his recent great speech at Birmingham, John Bright cheered all English Liberals by a free expression of his dislike of Mr. Forster's school law and the past educational policy of the Government. He expressed the hope that the just demands of Nonconformists would be complied with. These demands are that the educational system, paid for by the state, shall not be systematized Anglican propagandism; that public money paid for education shall not be an endowment of religious denominatious in disguise. Some three years since, Mr. Bright announced his opposition to distinct technical religious teaching in schools sustained by the government, but he has never gone so far as to favor the exclusion of all religious teaching and all use of religious sanctions and motives. In 1870 he said, "What I think is to be taught in every school, to every child, is this: Love of truth, love of virtue, the love of God and fear of offending Him." This is a moral basis on which the public school can stand without offending the conscience of any one. Can the basis be narrowed?

—— An article in the *Canadian Monthly*, attributed to Professor Goldwin Smith, records the failure of the scheme of combining manual and intellectual labor at Cornell University. He states that the "Labor Corps" still exists, but it includes but a few students, and these unite an extraordinary degree of bodily vigor with mental ambition. He attributes this failure to the fact that intellectual and manual labor both draw upon the same fund of nervous energy, which, when exhausted by one, can not supply force for the other. What a student requires after hours of hard study is not another kind of work, but rest and recreation. The manual labor experiment has been often tried in this country, and uniformly without success. Its failure at Cornell, where it has been tried under the most favorable auspices as a cherished idea of Mr. Cornell, the founder of the institution, ought to be decisive. The only condition under which it can succeed, is the requirement of manual labor of *all* the students, with a corresponding reduction of the time usually allotted to study. We believe that the experiment is being tried on this basis at the Hampton Institute in Virginia.

——The board of education of New York has not yet taken action on the report of its committee recommending the restoration of corporal punishment in the schools. At the meeting held Dec. 3d, a long communication from Edward C. Cockney, reviewing the committee's report, and earnestly protesting against the restoration of whipping in the schools, was read. Mr. Cockney evidently thinks that there is but one side to the question, and that he has left nothing to be said. The subject was, however, further discussed by the members of the board, and attention was called to the fact that the committee's recommendation is sustained by 1,200 of the 1,250 teachers in the male grammar schools. Votes taken on a motion to recommit and on the previous question, show that the board is about equally divided, while a two-thirds' vote is required to change the present by-law.

——When the report of the National Commissioner of Education for 1872 came to our table, we intended to favor our readers with a somewhat full abstract of its contents, including its valuable statistics. But from month to month we failed to find the necessary time to prepare such an abstact, and now we are too near the appearance of the report for 1873 to justify its preparation. Suffice it to say, that the report is a mine of important information relating to the progress of education in this and other countries. Though it contains over one thousand pages, the Commissioner regrets the necessity of omitting many subjects of interest, and the meagre presentation of many others. The many friends of the Bureau are rejoiced to see the evidence of its increasing usefulness and of an increasing public appreciation of its value as an efficient and needed agency for the promotion of education throughout the country. It is honoring the wisdom of those who advocated its establishment. It is hoped that the present Congress may increase the appropriation for the support of the office, that its increasing work may be well done. The present force is clearly inadequate. It is also hoped that a much larger edition of the annual reports may be published, that they may be more widely distributed.

——Dr. Clarke's recently published book on "Sex in Education" (James R. Osgood & Co., Boston), has given a fresh impetus to the discussion of the question of coëducation. The doctor's position that girls are physically incapable of enduring the same amount of study as boys, is receiving special consideration. The ablest review of the book which we have noticed, is that by Mr. T. W. Higginson, in the *Woman's Journal*. He maintains that Dr. Clarke's facts are not sufficient to justify his conclusion; that it can only be established by facts relating (1) "to the comparative physiology of American women in different localities;" (2) to American-born women of different races; (3) to the comparative physiology of different social positions; and (4) facts obtained "by an extensive record of individual instances." In the absence of these obtainable facts, Mr. Higginson holds that Dr. Clarke's position is "a mere

hasty assumption." He also calls attention to the fact that Dr. Clarke makes no reference to those preservative and counteracting influences in higher education, which tend to make the health of studious girls better than that of others. Dr. Clarke's book has also been sharply criticised by Miss Anna C. Brackett, of New York, who brings half a dozen serious charges against it.

—— THE death of young Leggett has resulted in the adoption of the following resolutions by the faculty of Cornell University:

"*Resolved*, That no secret society shall be allowed to be established or remain in the University which shall not be shown to the satisfaction of the faculty to be favorable to scholarship, good order, and morality, and to be free from all initiation or other rules, ceremonies or proceedings, dangerous, degrading, or unworthy of gentlemen and members of an institution of learning.

"*Resolved*, That no student be allowed to become or to remain a member of any society publicly condemned by the faculty; and no person shall receive an honorable dismission or any degree, who shall not, at the time of applying for the same, satisfy the faculty that he has not violated this rule.

"*Resolved*, That no association of students for the mere purpose of initiation, or mock societies shall be allowed in this University: and that any student who shall join any such association or mock society, knowing it to be such, or engage in any of its initiation proceedings, or in any proceedings of the nature of mock initiation, shall be suspended or expelled from the University.

"*Resolved*, That nothing contained in these resolutions shall be held to restrict the faculty from further action regarding college societies of various sorts, should the present action be found ineffectual."

It is to be hoped that every college and university in the country will take similar wise and positive action, and that there may be an end of the ridiculous mummeries which have so long disgraced too many college societies.

—— THE death of Agassiz has filled two continents with sorrow. Never before, we believe, has the death of a man of science been so widely lamented. Wherever science is honored, there the press, the pulpit, and the platform sadly express the public grief, and pay heartfelt tribute to his greatness as a scientist and a man. His health has been poor for several years, obliging him at times to rest from his excessive labors, but as soon as vigor was somewhat restored, his ardent zeal for science tempted him to overtax his strength. What the *Nation* calls "the fatal gift" of Penikese robbed him last summer of needed rest, and the pressing duties of autumn continued the fatal demand upon his strength. He died of paralysis on the evening of Dec. 14th, in his sixty-seventh year. Next month we shall give a brief account of his scientific researches and of his labors for the promotion of science and education.

—— SUPT. JOHN HANCOCK, of Cincinnati, recently delivered an able address on "Education by the State" at a meeting of the Friends of Inquiry, held in that city. He earnestly advocated the right and duty of the state to provide educational advantages for all its citizens, to the highest extent practicable. In the discussion which followed, one of the speakers opposed all education by the state.

THE TEACHER'S PREPARATION FOR THE RECITATION.

The recitation is largely the condition and measure of the teacher's success. Skill here insures success in almost every direction, while a failure here is a failure throughout. Prompt, thorough, and inspiriting recitations create in the pupil a love for study, secure vigorous application, and promote good order. If, on the contrary, the test to which the pupil is subjected in the recitation, be haphazard, superficial, and lifeless, his preparation will be quite sure to have the same characteristics. In other words, the study of the pupil, both in extent and thoroughness, will not rise, as a general rule, above the requirements of the recitation. It is, therefore, of the highest importance that the teacher come before his classes prepared to do his work skillfully; and this preparation must extend to every recitation and to every exercise. The teacher's preparation must be as wide as his duties. He can not afford to fail anywhere, and, without careful preparation, he is almost sure to fail somewhere.

The teacher's preparation for conducting the recitation should include:

1. *A familiar acquaintance with the subject matter of the lesson.* He should have the whole subject in his mind, not in dim and shadowy outline, but in bold relief, with every essential fact and principle clear and distinct. His knowledge of the subject taught must be systematic, fresh, ready—*at hand.* In the presence of his class, he has no opportunity to recall the half-forgotten results of past study, or to pursue some new idea or casual inquiry to see whether it be substance or shadow. Every power and energy of his mind are required to search through the minds of his pupils; to test the results of their study; to arouse a dormant faculty here and to energize a feeble power there; and so to order the entire work of the recitation that the pupil's knowledge may be made clearer, his impressions deepened, and his view of the subject as a whole made more distinct and permanent. All this requires special previous preparation, a preparation wider than the particular text-books used by the class—a mastery, indeed, of the subject in its entirety.

2. But the teacher must also be familiar *with the particular text-book studied by his pupils*, otherwise he will not be able to test thorough their study—a matter of vital importance. Few of the text-books used in our schools are designed to be exhaustive. They afford only the *text* for the lesson, presenting only an outline of the several subjects treated, with such details as, in the judgment of the author, are most important. This outline and these details, few or many, constitute the basis of the pupil's preparation. Clearly, before the teacher can test efficiently the pupil's mastery of the subject as thus unfolded, he must himself be as familiar with the author's treatment of it as he desires the pupil to be. He must not only know what facts are presented, but the order in which they are presented. Such an acquaintance with the text-book will enable the teacher to select and arrange his questions or topics so as to cover completely the lesson assigned, and to detect any remissness in study or any failure of comprehension on the part of the pupil. All this should be done without a slavish use of the text-book. In conducting recitations in reading and spelling, the teacher may be obliged to use the book.

The use of the book may also be justifiable in assigning problems in mental and written arithmetic. There are, however, few practices common among teachers more pernicious than the use of printed questions in catechising classes. It reduces the teacher to a sort of machine, places an obstruction between him and his pupils, represses all enthusiasm, and renders the recitation mechanical and lifeless. A reference to the text to determine the correctness of the answers given by pupils, is an evidence of incompetency too palpable to be justified. It may be accepted by the young teacher as a guiding maxim, that the *minimum* of his dependence upon the text-book in conducting recitations will be the *maximum* of his success. He should aim to come before his classes with a *free hand* and a *free eye.*

3. The teacher's preparation should also include *the method of conducting the recitation.* Other things being equal, the better the method, the better will be the results attained. "In what manner can I test the study of my pupils most thoroughly?" "How can I secure the highest possible amount of mental effort from each pupil during the recitation?" "How can I best teach this principle?" "What new illustration can I use?" "In what respects should my general method be modified in hearing this particular lesson?" These are some of the inquiries which daily spring up in the mind of the earnest, progressive teacher. He is not satisfied to repeat the blunders and failures of yesterday without an effort to avoid them. Every day renews the struggle for the attainment of truer results. Under the inspiration of an unattained but not unattainable ideal, his entire work is subjected to close scrutiny. The educational principles which underlie his methods, are searched out and their correctness is carefully examined. One guiding maxim after another is accepted and acted upon. Nor does he overlook those details which make up what may be termed the mechanism of his school. The best mode of calling out and dismissing classes; the best mode of calling upon pupils to recite; the best position for them to assume when reciting—these and other inquiries receive careful attention, with a consequent increase of skill and success.

4. In order that the pupil's preparation may be thorough, *each lesson should be properly assigned*—a matter too often neglected. In the proper assignment of lessons there are at least three things to be considered, (1) the capability of the class; (2) the time available for study; and (3) the nature of the lesson. To assign lessons frequently which are beyond the pupils' ability to master, is sure to break down the spirit of study in any school. Before assigning a lesson a teacher should make himself familiar with its difficulties, so that he may be able to estimate both the amount and degree of mental effort necessary for its preparation. The lesson should be assigned definitely, and the requirements of the recitation should be clearly stated. Whenever the lesson contains anything that is difficult or specially important, the attention of the class may be called to the same, but, as a general rule, no formal or direct explanation of difficulties should be given until the pupils have attempted their mastery. Prior explanations take from the pupil the necessity of earnest effort, and destroy that manly independence which is the very soul of

study. It is the teacher's office to guide and stimulate, but the pupil must himself wrestle with the difficulties which confront him. The teacher may point out the best path, but the pupil must do the climbing. The practice, common in some of our schools, of explaining in advance every rule or process in arithmetic, is pernicious. It reduces the pupil to a mere figuring machine. We here refer more specially to the assignment of lessons to advanced classes.

It may be added for the encouragement of young teachers, that the faithful preparation for the duties of the recitation, above indicated, will lighten the burden of school government, lessen the fret and wear of teaching, keep the mind fresh and vigorous, and promote good health. We will not take the space to make any explanation or defense of this statement. Its correctness may be readily tested.

EDUCATIONAL INTELLIGENCE.

—— When notified that a subscriber has failed to receive any number of this journal due him, we always remail it.

—— Now is the time to send in the subscriptions for the Teacher for 1874. Our new books are opened. Single subscriptions may be safely remitted by mail in currency.

—— The State Teachers' Association of Michigan met at Ann Arbor, Dec. 30th and 31st; the Indiana Association at Indianapolis, Dec. 30th and 31st, and January 1st; the Illinois, at Bloomington, Dec. 29th, 30th, and 31st.

—— Supt. W. E. Crosby, of Davenport, Iowa, announces his purpose to publish a new educational journal, having for its chief aim the advocacy of the common school system, and for its second object, the consideration of the teacher's work.

—— Mrs. Ogden has received several applications from persons who desire to join a Training Class of Kindergartners, to be formed in connection with her Kindergarten, in Columbus, O., Jan. 5th, 1874. See her announcement in this number.

—— Within a few weeks we have received numerous marked papers from Minnesota, containing sad evidence of an unfriendly feeling between several members of the State Normal Board and the principal of one of the State Normal Schools. We assure all concerned that the marked articles have not been pleasant reading for us. We except the last which indicates a restoration of harmony.

—— We are sorry to learn that Hon. J. M. Simonds retires from the office of State Superintendent of Public Instruction of New Hampshire, at the close of his present term. He has filled the office for two years past with marked ability and energy, and a new impulse has been given

to all the educational interests of the Granite State. This is the third change in the office since its establishment in 1867, with a consequent loss of efficiency and usefulness.

—— Mr. J. C. Hartzler, formerly superintendent of the schools of Galion, O., has accepted the general agency of the publishing firm of Messrs. Wilson, Hinkle & Co. for the state of Illinois. He writes us that he reluctantly leaves his adopted state, "with her excellent school system and noble band of educators." We heartily commend Mr. Hartzler to the Illinois fraternity as a practical educator and a true gentleman.

—— Prof. Phelps, of the Minnesota State Normal School, at Winona, delivered an excellent address before the State Agricultural Society at the last State Fair, held at St. Paul. The influence of intelligence on labor was admirably presented. We wish that more of our State Fairs would test the value of ideas as well as the speed of horses.——Prof. W. P. Burdick, of Omaha, has accepted the superintendency of the public schools of Marshalltown, Iowa.

—— The reëstablished State Normal School of Rhode Island, Prof. J. C. Greenough, principal, has attained a marked success in two years, both in actual results and in public appreciation. A new building is greatly needed to meet the increasing demand for accommodations.—— We learn that the new Kentucky Normal School at Carlisle, in charge of Prof. T. C. H. Vance, is prospering beyond the most sanguine expectations of its friends.

—— The *New York School Journal* states that the opening of the colored public schools of Louisville, Ky., has closed nearly all the private schools where the colored people, old and young, were taught merely reading and spelling. There are now four public schools for colored youth in the city, attended by about 1,000 pupils, and supported at an annual expense of about $5,000.——The colored people of Savannah, Ga., have petitioned for public school advantages.

—— The recent school elections in Great Britain were marked by extraordinary excitement, the main question at issue being the present policy of including voluntary denominational schools in the national system of education. At Manchester, Sheffield, Liverpool, Birmingham, and other cities, the number of votes cast was greater than at any previous election. The liberals generally advocate Mr. Cobden's plan of separating secular and religious teaching, the latter to be provided by voluntary effort, not at the expense of tax-payers.

—— The State of Massachusetts was awarded at Vienna a "Diploma of Honor", the highest prize, for education, and the state of Ohio was awarded a "Medal for Progress", the second prize, for its educational exhibit. These are the only American states, we believe, that received educational prizes at the Vienna Exposition. School Commissioner Harvey has presented the Ohio school specimens to the Austrian Government to be preserved in the permanent "Educational Exposition" to be founded in Vienna.——In the face of Ohio's honor, as above no-

ticed, a correspondent calls our attention to the fact that of the 694,348 pupils enrolled in the common schools of the state in 1872, but 3,656 studied physiology. He thinks this fact is not very creditable.

—— The annual meeting of the State Teachers' Association of Connecticut, held in Hartford in November, was largely attended, and several important subjects were ably presented. The event of the meeting was an eloquent address by Henry Ward Beecher on universal education, closing with a forcible argument for compulsory school attendance.

—— The cities of Bath and Lewiston, Maine, have availed themselves of the provision of the law, passed two years since, giving cities and towns authority to furnish the schools with free text-books. This practice has long prevailed in New York, Philadelphia, and a considerable number of other eastern cities. We are not sure that it is the best policy to supply text-books at public expense, possibly excepting large cities, but drawing and writing books, pens, pencils, paper, and all other stationery should be thus supplied. The sending of pupils to their parents for these articles is a great nuisance.

—— The public schools of Wheeling, W. Va., for many years under the wise direction of Supt. F. S. Williams, are making good progress. More than one-third of the youth in the city between the ages of five and twenty-one, are enrolled monthly, and the teachers are making earnest efforts to secure regular attendance. A pupil in one of the schools, Sallie Thoburn, has not been absent or tardy in *six years*, and her sister Annie has been absent but one-half day in the same time. They must represent a remarkably well-regulated family. The attendance on the Saturday teachers' meetiugs continues good, the majority of the 72 teachers being present.

—— A writer in *Scribner's Monthly* for November (Edward King) states, on the authority of superior school officials, that the school money appropriated to the different parishes of Louisiana has, in many cases, never been used for school purposes, and legal efforts to recover the money are of but small avail. The present school law is quite well adapted to the condition and wants of the state, but it can not, of course, execute itself. When parish school boards all do their duty, better results will be attained. But, notwithstanding great obstacles, the school system has made much progress. In 1868 there were less than 100 public schools in Louisiana; in 1872 there were 1,100 schools, with nearly 100,000 pupils.

Tennessee.—The annual meeting of the State Teachers' Association in Nashville, the second week of December, was the most important yet held. The new law has put spirit and pluck into the public school men of the state, and the good cause moves hopefully forward. The opening address by State Superintendent Fleming struck the key note of enthusiasm, and the interest was well sustained to the close. Dr. Sears gave two addresses, one on normal schools; Supt. Mallon, of Savannah, Ga., read a capital paper on the teaching of composition, prefacing it with a

few earnest words respecting the progress of the public school cause in Tennessee and Georgia; and Prof. A. B. Stark, of Lebanon, ably presented the subject of teachers' institutes. The harmonizing of public and private schools was earnestly considered. It was decided to publish an educational journal, under the auspices of the Association and the State Superintendent. The third day was devoted to a meeting of county superintendents.

MAINE.—At the meeting of the State Educational Association, held at Waterville, the last week of November, State Superintendent Johnson stated that the aim of the educational policy of the State Department the past six years was, first, to secure better instruction; second, efficient inspection and supervision; third, sufficient and well-established school revenue; and, lastly, obligatory attendance to secure the education of every child. The present special need is more efficient school supervision, and to secure this further legislation is needed. This policy was strongly indorsed by the Association, and the progress already made in carrying it out was declared a cause of rejoicing. Resolutions were also passed specially approving of the "Free High School System", and declaring an efficient system of county or district supervision indispensable to the success of the school system. Maine has one of the most energetic and efficient State School Superintendents in the country.

OHIO.—The public schools of Toledo enroll about 6,500 pupils, with an average attendance of 4,600. The number of teachers employed is 110. The pupils in all the schools visited manifested a most commendable promptness and willingness in complying with the teachers' requirements. We were specially pleased with the reading. The articulation, particularly of the girls, was remarkably distinct, and the movement was not too rapid. The teachers take special pains to express the feeling as well as the thought of what is read. A noticeable and valuable feature is the systematic course of oral instruction, designed to lead the pupils to an acquaintance with the elements of the various sciences, the instruction in the lower grades being confined to such knowledge as is gained through the senses. For example, in botany they are taught those distinctions, depending on difference of form, color, size, etc.; in natural philosophy, the obvious properties of matter, as weight, brittleness, etc.; in climatology, the forms and properties of water, the obvious properties of air, its capacity for moisture at different degrees of temperature, etc. The primary object of all this instruction is to exercise the pupils in the use of language, in conversation, and in writing. Letter writing and formal papers are required. The excellent features noticed in drawing seem to be the result of Supt. De Wolf's theory that it is impossible to cultivate taste in pupils through practice of elements alone, or by mere drill. The attempt is made, by the constant use of the most perfect models, to secure a high and correct ideal, an æsthetic culture, according to the capacity of each pupil, and through this ideal to secure skill in realizing results. This appeal to the sentiment of beautiful assists greatly in bringing about the superior results which are noticeable in many of the reading classes.

BOOK NOTICES.

GREEK PRAXIS: Or, Greek for Beginners, containing Orthography, Etymology, and Greek Reading Lessons, together with Notes and a Vocabulary. By J. A. SPENCER, S.T.D., Professor of Greek in the College of the City of New York. New York: Ivison, Blakeman, Taylor & Co.

The object of this volume is to bring together, in a compact and convenient form, such matter as is *essential* to the beginner in Greek—such as must be *mastered*, before he can enter with comfort or satisfaction, upon the reading of a Greek author. After the flood of Greek lessons on the "Ollendorf System", the "Robertson System", and no system at all, each professing to have found the royal road to a mastery of the Greek language, one dispensing with all the drudgery of study, if not with study altogether, it is refreshing to find an author who has courage enough to say:—

"There is a necessity, not to be evaded, of *memorizing* the elementary forms and inflections of the language, to the extent at least of what is herein contained, if one desires to begin rightly, and to acquire the capability in due time of accurately reading and understanding the marvelous and beautiful Greek tongue."

These words, the result of the large experience of one of the most scholarly and successful teachers in this country, will be heartily echoed by the many others who have known to their sorrow the slipshod ignorance of forms of those who have traveled these new ways. The author's name is a guarantee for the character of the work. It is sure to find favor with the best teachers.

LATIN PRONUNCIATION: An Inquiry into the Proper Sounds of the Latin Language during the Classical Period. By WALTER BLAIR, A.M., Professor of Latin in Hampden-Sidney College, Va. Pp. 136. New York and Chicago: A. S. Barnes & Co. 1873.

The subject of Latin Pronunciation has attracted so much attention of late, that a book setting forth clearly and concisely the freshest results of science in that direction, and outlining the arguments relied upon in support of its conclusions, must be acceptable to many who, while interested in the subject, have not the time or the inclination to take up the more extensive and original works. This brief compend of Prof. Baird's is, we think, well adapted to meet the wants of this class. His conclusions are, in the main, in accordance with the recent Syllabus of the Universities of Oxford and Cambridge, and that agrees, in most essentials, with the results reached by Corssen in his masterly "Aussprache."

SURVEYING AND NAVIGATION, with a Preliminary Treatise on Trigonometry and Mensuration. By A. SCHUYLER, M.A., Professor of Applied Mathematics and Logic in Baldwin University. Cincinnati and New York: Wilson, Hinkle & Co.

It is always a pleasure to examine a mathematical treatise prepared by Prof. Schuyler. It is certain to bear no evidence of haste. Whatever he attempts is done carefully and thoroughly. The work before us is a fine illustration of what scholarly labor can accomplish. It is fresh, ac-

curate, and thorough. Instead of the meager sketch of plane trigonometry which usually prefaces treatises on Surveying, the author has given a full and admirable treatment of both plane and spherical trigonometry and mensuration. This avoids the necessity of a separate treatise on these subjects. We can not specify the characteristic features of the author's treatment of the several subjects. We are pleased to see that the method of surveying the public lands, now employed by the United States Government, is fully explained, and illustrated by field notes of actual surveys. The methods of finding the true meridian and the variation of the needle are clearly and fully explained. We consider this one of the very best treatises on applied mathematics issued for years.

THE UNITY OF NATURAL PHENOMENA, a Popular Introduction to the Study of The Forces of Nature. From the French of M. EMILE SAIGEY, with an Introduction and Notes by THOMAS FREEMAN MOSES, A.M., M.D., Professor of Natural Science in Urbana University. Boston: Estes & Lauriat.

This volume of 253 pages is the first of a series of "Science for the People" to be published by the same firm. The author finds the unity of all natural phenomena in ether. He holds that ether plays a more important part in the economy of the universe than simply to fill all inter-stellar space, and by its undulations make possible the transmission of light. He makes it the "constitutive element" of all the atoms of all bodies in the universe. The united atoms of ether form molecules and united molecules form bodies, and the etherial movements constitute gravity, light, heat, electricity, and life. The author does not prove this,—probably it could not be proved, if true,—but he certainly says some interesting things on the subject. The work gives much valuable history of the progress of discovery in the scientific world, and the book is a readable one to those interested in this class of subjects. Prof. Moses gives us an excellent translation of the author, and has added many valuable notes. The publishers have made the work in paper, type, binding, etc., a book of unusual beauty.

PATTERSON'S SPELLER AND ANALYZER. Adapted to Written Lessons, and accompanied by an EXERCISE BOOK. By CALVIN PATTERSON. New York: Sheldon & Co.

This new speller contains several excellent features. The first few pages contain the more important rules for spelling, with columns of words illustrating the same. These are followed with rules relating to the etymology of words, with lessons to illustrate. The next lessons contain common terms used in the sciences. The succeeding lessons give words from the same root, names of cities, persons, etc., words liable to mispronunciation, foreign phrases, dictation exercises, etc. The work was evidently prepared by a practical teacher who has given much attention and thought to the teaching of orthography. The six thousand words in it are those which the advanced pupil should know how to spell.

The accompanying Exercise Book is made of good writing paper, and the pages are ruled in three spaces, affording room for seventy-five

words. An appendix of ten pages is prepared for the copying of the misspelled words. Full directions for the proper use of the book are given.

We commend this new aid to spelling to the attention of teachers.

MITCHELL'S ELEMENTS OF PHYSICAL GEOGRAPHY. By JOHN BROCKLESBY, A.M. Philadelphia: J. H. Butler & Co.

An examination of the last edition of this work confirms the high opinion of its merits, expressed when it first appeared in 1868. Its arrangement and plan are excellent, its treatment of topics concise and perspicuous, and its illustrations numerous and admirable. It is one of the best of American text-books.

LESSONS ON POLITICAL ECONOMY. For Schools and Colleges. By J. T. CHAMPLIN, President of Colby University. New York: A. S. Barnes & Co.

President Champlin has here prepared a work of much merit. All the fundamental principles of political economy are ably and clearly discussed, although with great brevity and conciseness. So condensed a treatise will require a more capable teacher, when used as a text-book, than if it were fuller and richer in illustrations. The author favors the contraction of the volume of our currency, free banking, free trade in money — unchecked by usury laws, and free trade between nations. Many of his opinions we do not hold, and should not let go unquestioned in the class-room, but on a subject like political economy, it would be folly to expect any treatise in which all the views would be acceptable to all readers.

EDUCATION ABROAD, AND OTHER PAPERS. By BIRDSEY GRANT NORTHROP, LL.D. New York and Chicago: A. S. Barnes & Co.

This volume consists of ten papers, selected, with very few exceptions, from the author's annual reports as Secretary of the State Board of Education of Connecticut—a fact which does not in the least lessen their value. The titles of the ten papers are: "Should American Youth be Educated Abroad?", "Legal Prevention of Illiteracy", "Culture and Knowledge", "The Professional Study" (Mental Philosophy), "Study and Health", "Labor as an Educator", "Education and Industrial Arts", "Education and Invention", "Labor and Capital Theoretically Harmonized", and "Labor and Capital Practically Harmonized." Each of these subjects is treated with Dr. Northrop's well known vigor and ability. The first paper presents his views of European schools, with an earnest protest and warning against the fashionable folly of sending American children abroad for an education. His position is fortified by the published opinions of the presidents of the leading colleges of the country and of many other eminent educators. The second paper ably and earnestly advocates compulsory school attendance. It opens with the statement that his former objections to compulsory education were fully removed by observations recently made in Europe. A careful reading of the paper has not removed our doubt respecting the practical efficiency of compulsion in *this* country. We are much pleased with the

opening paragraphs of the paper "Culture and Knowledge." The book should not only be in every professional teacher's library, but it ought to be widely read by the American people.

LITTELL'S LIVING AGE: A Weekly Magazine of Sixty-four Pages. $8 a year. Boston: Littell & Gay.

Magazine literature has become a necessity. Few have the time or the means to avail themselves of the complete works on every possible subject of human interest with which the press teems; yet no intelligent man can afford, for his own sake, to be ignorant of the progress of the great questions which are throbbing in the heart of the passing age. No man who fills a place in society, can afford, for its sake, to be uninformed on the grave questions of the passing hour. Few, after the years of education have passed, and life's duties press, have the leisure for more than at most the cultivation of a specialty; yet no one can afford to be only a specialist. He will grow narrow, intolerant, dogmatic. Yet who can keep abreast of the day in its literature, its science, its criticism, its current history, its national politics, its moral and religious movements, its discoveries, by thorough personal investigation of all these? Few, if any; yet the terse monogram, penned by the hand of a master, may suffice to give a clear and definite view of the results of many an elaborate work of history or of science. The busy toiler in life's workshop may thus keep up and even extend his acquaintance with the living thought of the living age in which he acts his part.

A selection of such monograms on all subjects of interest, drawn from all the most able of the magazines of the old world, of every shade of opinion, is the specialty of *Littell*, and its most valuable feature. A glance at the table of contents for a single year will convince any one of its value to the man of general intelligence. Biography, science, literature, criticism, travel, politics—all have place, and living questions, such as arise out the progress of science, civilization, and religion have special prominence. With great impartiality the advocates of opposing views are left to speak for themselves. Our own country and the questions which affect us, are presented to us through the eye of European observers. The progress of republicanism in Spain and France is recorded. The movements in the Papal world are noted. Very few are the numbers in which single articles are not worth the price of the whole. The poems, always brief, are often gems. If space permitted to particularize, it would be easy to set forth an array of articles found in the current year of *Littell*, which would amply vindicate all we have written. Its place in our current literature is unique, and can not be supplied. To have what it presents week by week, we must have the *Living Age* itself. Once had, it becomes a necessity.

SCRIBNER'S MONTHLY. An Illustrated Magazine; Conducted by J. G. HOLLAND. New York: Scribner & Co.

Happy is the family to which *Scribner's Monthly* comes as a regular visitor. Beautiful in feature and dress, sunny and bright, wise and reverent, the *Monthly* is ever thrice welcome. Certainly no magazine has

such finished engravings, and few, if any, use so large and clear type. We confess, with a sigh, that we have reached that point anong the changes of this mutable life when the eye craves large, open type, and that in our ocular condition *Scribner's Monthly* is our special delight. Our children, whose eyes are young and bright, like it not less, for when approaching twilight, or mayhap, approaching supper, gathers them within doors, can not they read *Scribner* ten or fifteen minutes after finer print has been prohibited? And when the evening lamp or gas is lighted, very dim and flickering must be the light to prevent the enjoyment of *Scribner*. The editor, Dr. Holland, never fails to give, in his "topics of the time", short, crisp editorials, always bright and readable. In the December number he compares the American gentlemen of leisure to a lost dog—"not a dog recently lost, full of wild anxiety and restless pain and bewilderment, but one who had given up the search for a master in despair, and had become consciously a vagabond." The article is very short, but no reader will ever forget it. The tone of the magazine is high, and while it favors a large and generous liberty in investigation, whatever may be the subject, it adheres to Christianity with the firmness of Christian men, who have seen the power of Christianity without and felt it within. The contributions are generally good and pertinent to the times. The scientific department is probably as full as would be popular with the average reader. The magazine, as a whole, is admirable, and one of the very best published in the world.

ST. NICHOLAS. Scribner's Illustrated Magazine for Girls and Boys. New York: Scribner & Co. Price, $3.00 a year.

This is an era of improvements, and among the most noticeable are the improvements made in juvenile literature, the latest and most remarkable of which is the *St. Nicholas*, the new juvenile magazine published by Scribner & Co. It is splendidly illustrated, and the contents are fully equal to the illustrations. The conductor is Mrs. Mary Mapes Dodge, the author of that charming story "Hans Brinker", and late editor of the *Hearth and Home*. This fact is a sufficient guarantee of the success of the magazine. *Our Young Folks*, the best of the former juveniles before the appearance of the *St. Nicholas*, and all its popular features, including serials, etc., will be made a part of *St. Nicholas*, in addition to its own peculiar merits. We do not see how the new magazine can fail being the best and most popular illustrated juvenile magazine in America. The holiday number is a gem.

—— WE call special attention to Mr. Rolfe's inset advertising Lippincott's Reference Books, and most heartily indorse what Messrs. Pickard, Harris, Bateman, and others say of their value. They should be found in every grammar and higher school in the country, and it is not creditable to our teaching or our wisdom that they are not.

THE NORMAL MONTHLY is the title of a new educational Journal, published by the State Normal School, Millersville, Pa. It is edited by Prof. Edward Brooks, assisted by other teachers in the school. The opening numbers are very promising. It is neat, able, and practical.

—— We will furnish The National Teacher for 1874 and *Littell's Living Age* for $8.00; the Teacher and *Lippincott's Magazine* for $4.00; the Teacher and the *College Courant* for $3.50. For $2.25 we will furnish the Teacher and any one of the Educational Journals whose subscription price is $1.50.

NEW BOOKS RECEIVED.

Sex in Education; or, A Fair Chance for the Girls. By Edward H. Clark, M.D. Boston: James R. Osgood & Co. 1873.

Technical Education: What It Is, and What American Public Schools should Teach. By Charles B. Stetson. Boston: James R. Osgood & Co. 1874.

Philosophy of Rhetoric. By John Bascom, Professor of Rhetoric in Williams College. New York and Chicago: Woolworth, Ainsworth & Co. Price, $1.50.

The Payson, Dunton & Scribner Manual of Penmanship. By P., D. & S., Authors. New York: Woolworth, Ainsworth & Co. Price, $1.25.

Introduction to English Grammar; An Easy Method for Beginners. By Harriet S. Long. Philadelphia: J. B. Lippincott & Co. 1874.

Text-Book in Intellectual Philosophy. For Schools and Colleges. New Edition, Greatly Improved. By J. T. Champlin, President of Colby University. New York and Chicago: Woolworth, Ainsworth & Co. Price, $1.50.

Chapters on Intellectual Philosophy. Designed to Accompany Champlin's Text-Book of Intellectual Philosophy. New York: Woolworth, Ainsworth & Co.

A Drill-Book in Elocution. By O. H. Fethers. St. Louis: H. L. Aldrich, 302 N. Main St. A Copy for Examination will be sent, postage paid, on receipt of twenty-five cents.

The National School Songster. By Asa Fitz. Boston: D. C. Colesworthy.

Thompson's Eclectic System of Drawing. In Four Numbers. By L. S. Thompson. St. Louis: Hendricks, Chittenden & Co.

Krusi's Drawing. Analytic Series. Six Numbers. By Herman Krusi, A.M. New York: D. Appleton & Co.

Krusi's Drawing. Manual for Teachers. Inventive Course—Analytic Series. By Herman Krusi, A.M. New York: D. Appleton & Co. 1873.

PAMPHLETS.

Circular of Information of the National Bureau of Education. No. 5. John Eaton, Jr., Commissioner.

Report of the Committee on Moral Instruction before the Cincinnati Principals' Association, Thos. M. Dill, Chairman.

The Future of the Republic: Its Dangers and its Hopes. An Address at Western Reserve College by Hon. James A. Garfield.

University of Nebraska. Address of Hon. L. Crounse, M.C.

Proceedings of the Fifth Annual Session of the American Philologica Association, held at Easton, Penn., July, 1873. 1

New Hampshire School Register. With blanks for School Returns.

Classification and Course of Study recommended for the District Schools of Kansas. By H. D. McCarty, State Supt.

ANNUAL SCHOOL REPORTS.

Kentucky, 1872-73. H. A. M. Henderson, State Supt.

Chicago, Ill., 1872-73. J. L. Pickard, Supt.

Savannah, Ga., 1873. W. H. Baker, Supt.

THE

NATIONAL TEACHER:

A MONTHLY EDUCATIONAL JOURNAL.

Vol. IV. FEBRUARY, 1874. No. 2.

THE NEW METHODS OF INSTURCTION.*

BY JOHN HANCOCK, CINCINNATI, O.

When we speak of the methods of teaching recently introduced into our best schools as *new*—methods which substitute for a cramming of the memory with dry formulæ of phraseology a development of the mind according to nature's laws and by means of processes philosophic, and sure in their results—we mistake as to severe accuracy of expression. In a strict sense these methods are old, and are the ones which have been used by all who have had a genius for teaching, from the earliest ages. Of the ancients, Socrates is the most eminent example. Unlike the sophists, his rivals, who in no respect differed from the routine teachers of the present day, he did not attempt to amuse the Athenian youth with disquisitions on rhetoric and oratory, but, with a boldness and acuteness which have made him immortal, he directed his teaching to the hidden sources of intellectual life. He was too earnest, and had too high an appreciation of the teacher's mission to waste his time in speculations concerning the externals of living. His self-imposed task was to unfold the intellectual and moral powers of his disciples, to render them acute self-contained thinkers, not deft craftsmen in the use of grammatical subtilties—for his own subtilties were subtilties of thought, not of mere expression,

* A paper read before the Central Ohio Teachers' Association at its Dayton meeting, Oct. 18, 1873.

ridiculed though they were by Aristophanes and the common herd of his people. And, fellow-teachers, though we hear so much of practical education in these days, what education can be more practical than that which gives us acute, vigorous, self-contained thinkers? Are such not apt to be supreme in affairs? and does not a tradesman's training sink into nothingness when compared with such an education?

When, therefore, we speak of the objective, or, using the more general term, the development method as new, we simply mean it is a method new in our own schools. Even with Pestalozzi, from whom we have more immediately derived it, it was a rediscovery.

Admirable as the new method is, using as it does the facts lying within the child's experience as means of his intellectual growth, rather than busying him with misty abstractions of undefined boundaries, it is by no means a method that is automatic. Sanguine school authorities are not to imagine that to set it up in a school-house is sufficient, and that all else may be left to its patent back-action. It must not be supposed either by any body, that any crude, untrained school boy or girl, who has been made, after many trials, the happy possessor of a six months' certificate, can march into a school, seize the crank of the "development machine", and turn out scholars in any true sense of the word. It may be even doubted whether a six months' training in a patent normal school—which is supposed to remedy all defects of talent and education—would furnish teachers competent for such a work. The fact is, the best methods, instead of being easy or self-acting, as too many suppose, are generally the ones that require the wisest teachers for their application. Experience does not lead us to expect to find any article at any time or anywhere, both good and cheap; nor does the rule differ in regard to actions. Things easily done are usually of little worth.

It may here be incidentally remarked, that an undue importance has been attached in our public-school systems to disciplinary machinery and courses of study. Much marching and a petrified stillness are the vaunted product of the one, and too often an unlimited spread over the field of learning—all surface and no thickness—of the other. Perfection in the mechanical management of a school is the more striven for, doubtless, because its virtues are so readily discerned, no great professional knowledge being required to distinguish a still school

from a noisy one, though the noise may be the result of life and work. Perhaps, too, that deepest (I will not say holiest) feeling of our nature—public economy—may have something to do in creating an admiration for the mechanical and routine method of conducting a school, for no great amount of talent or money is required to carry it out, whilst dynamic teaching requires brains, always a somewhat expensive article.

It may be, too, that the friends of the new method are themselves to blame for having caused, by their excessive laudation of their scheme of education, an expectation, on the part of those who have adopted it, of impossible results. The element of time can not be safely omitted in any problem of education. No tree will bear fruit until the proper season. What we are to labor for is a good crop. These friends have, also, too often regarded only the favorable features of their method, and have persistently refused to see any of the evils that might spring from its use in incompetent hands. Some of these evils I have set it as my task to point out.

MISAPPLICATION OF THE OBJECT METHOD.

One evil, and a general one, is the attempt to apply not the development method strictly (for that applies to every stage of education), but what is generally understood as the object method to subjects in which it is inapplicable. The object method, from the very nature of things, dispenses largely with the use of text-books, and relies on oral instruction almost exclusively. Now in the primary grades of schools—that is, in the first three or four years of the child's school life—this method of teaching can not be too highly estimated. It is in these grades that the pupil needs and must receive the energizing influence which comes from contact with a living teacher, and which comes not from contact with dead books. Thus through the tangible and easily understood things of the natural world, the child is gradually led without violence into the artificial world of books.

Again, in the period of the university education, is the oral method, which is not there a method of training, but takes on the form of the lecture, particularly appropriate. The student here has already learned to handle books and draw sustenance from them, and needs not the inspiration gained in the primary schools through the material world as interpreted by the teacher, but that grander moral inspiration that comes from contact

with a full and powerful living mind—such inspiration as Lord Cockburn describes himself as having received from the teaching of Dugald Stewart. He says:

"To me his lectures were like the opening of the heavens. I felt I had a soul. His noble views, unfolded in glorious sentences, elevated me into a higher world. I was as much excited and charmed as any man of cultivated taste would be, who, after being ignorant of their existence, was admitted to all the glories of Milton, and Cicero, and Shakespeare. They changed my whole nature. * * * No intelligent pupil of his ever ceased to respect philosophy, or was ever false to its principles, without feeling the crime aggravated by the recollection of the morality that Stewart had taught him."

"Object teaching [or oral instruction] has had many opponents from the first. Of late their number seems to have increased, or at least they are more outspoken than before. The method itself is declared to be utterly unphilosophical." There are two causes at least for this opposition. One is, that its opponents have never brought themselves to understand the principles on which it is based; and the other is, that they have judged its practical use from the "superficial, unintelligent manner in which some of the youthful teachers to whom this instrumentality is mainly intrusted" have applied it.

But oral instruction, whether in the primary school or university, may have method, or it may have none. I only appeal to the experience of all intelligent educators who have had an opportunity to observe the object lessons given in our schools by teachers who enter upon them as a disagreeable task set them by their board of education, when I say that nothing more fragmentary and unsystematic could be imagined; and nothing could contribute more to stultify the intellect, unless it should be the cramming of words unconnected with ideas, which was so prominent a feature of the ancient regime. Perhaps the first evil is of the two most worthy of denunciation; for in the unmethodical object lesson, the child's mind is brought up, day by day, to feed on the dry husks of dead facts, no faculty being exercised to any definite purpose; whilst in the cramming of words the memory is cultivated in a sort of a way—an abnormal way, it is true—and a vocabulary acquired, which may some day be of use, should the child ever be so fortunate as to find ideas to fit the words. But why attempt to decide which method is the worst, when both are irremediably bad? The presenting to children a mass of detached

facts having no logical relation to each other, is a sort of no-thoroughfare. They enter upon it expecting to end their journey in some pleasant house of learning, and they come out nowhere.

There is no principle in education more firmly established, than that the several steps in a course of instruction should be connected together in a perfectly logical chain. In other words, the lesson of to-day should not be given as separate and complete in itself, but as having an intimate relation to the lesson of to-morrow. Yet I will venture to say that no principle is so constantly violated by teachers in every grade of school, those who have adopted the most widely divergent methods of instruction. That teacher, then, who fails to keep constantly in mind this oneness of the scheme of instruction, will fail to gather the best fruits of educational training.

But the chief benefit of this unity of design in education lies not in the greater facility it affords for acquiring knowledge, but in the orderly habits it breeds in all the operations of the mind. Out of such habits grows not only certainty as to correctness of conclusions, but also high moral benefits.

Such being a truth, the lax way so many teachers have of arranging and performing their work, not only depreciates the value of the knowledge acquired, by always leaving mixed with it an element of uncertainty, but it also enfeebles the intellect itself. The more of such training—if it can be properly called training—a mind has, the worse for the vigorous and correct exercise of its powers. Better, far better, to trust to the vigor of a chance and untrained growth. Many men have arisen to greatness by their own undirected efforts, but few have had sufficient stamina of mental constitution to overcome the debilitating effects of a cram of miscellaneous and undigested facts.

TOO MUCH TIME SPENT ON WHAT IS FAMILIAR.

But allow me to set forth somewhat more clearly and specifically the errors that may accompany the use of our new methods—in object lessons, for example. It seems to me, in the first place, that too much time is spent upon things that are already quite familiar to the child. Every observing teacher knows that children can be forced, however desperate the effort, only up to a certain pitch of excellence in their lessons, and that perfection in those lessons is reached by but few individuals. But all observing teachers have not discovered the cause of

this. The cause lies in the constitution of the mind itself. The frequent presentation of the same thought wearies, and finally disgusts. The child may con over its lesson the second or even the third time with interest, but at the ninth or tenth, all interest has been lost and all activity of mind in connection with that lesson has ceased. More repetitions could have but one effect—to stultify the intellect. Too well do I recollect in my own experience, the unspeakable weariness which used to result from going over my reading lesson at least ten times, as the teacher directed, before I should be called on to recite. From this constitution of mind, it arises that the child can concentrate its powers on a lesson only long enough to reach a certain maximum result, and all effort of attention beyond this will lead but to weariness or disgust. And just one thought here. Courses of study may be made too short as well as too long. A six months' course spread over a year, will give, from the principles just enunciated, but little higher results, on examination at the end of the year, than would have been attained had the course been finished in six months, and the examination taken place at the end of that period. Nothing is worse than playing at study, and trying to make believe that it is earnest work, driving right along to a certain goal.

But to apply the foregoing principles to object lessons. To take, day after day, for lessons a succession of objects not extraordinarily interesting in themselves, which the child constantly meets and is as familiar with as the teacher herself, must soon dull the keen edge of curiosity, and become as sapless as any manifold repetition of words without ideas under the old system. Not that familiar objects are to be objected to at all times as the basis for lessons. There are purposes to which they are peculiarly adapted—oral language lessons and composition, for instance. But when they are used, except for the purposes just named, their obvious features should not be dwelt on, but the hidden qualities which lie beneath the penetration of the untrained observer, should be brought out clearly. And whether the object be a familiar one or otherwise, such an unfolding of hidden qualities will require a previous preparation of the lesson on the part of the teacher. What a ludicrous and yet sad sight it is to see a teacher who has devoted scarcely a moment's thought to her subject, stand before her class to give an object lesson. I have seen such a one exhaust herself and her knowledge in two minutes by the watch, and sit down in a

blind vacuity of mind pitiable to behold; and I have seen others, more ingenious but no better prepared, prolong the lesson by sudden and widely divergent plunges into the realms of the inane and of the commonplace, and return thence with little unconsidered trifles of information, that could never be of the least possible use or interest to any intelligent creature. Such is not even 'prentice work—it is a pretence and a sham.

OBJECT LESSONS SHOULD BE SYSTEMATIC.

I have already spoken in general terms of the faulty teaching which fails to connect together the several lessons of a series in a complete and logical chain. Teachers in giving object lessons are peculiarly liable to this error. The teacher who takes a piece of chalk for the lesson of to-day, the human body for to-morrow, a horse-shoe for a third day, a sponge for the fourth, and a school bag for the fifth, may amuse her pupils and train them to habits of observation after a sort, but the general result will be of little value. The pupils are learning nothing as they should learn it. No succeeding step is the easier for the one that went before it. No foundation for future scientific culture is laid, and no scientific methods of investigation followed. In fact, the whole work is done in a scatter-brain way, giving scatter-brain results.

And yet another fault in giving object lessons, has fallen under my notice. Children are not only permitted, but are encouraged to guess too much. As a consequence but little thinking and much wild and ridiculous answering are done. To this may be added much valuable time worse than wasted. They are asked to guess how words which they have never seen, and perhaps never before heard, are spelled, the words often being spelled in a dozen different ways before the correct spelling is reached, each incorrect spelling, of course, making its impression on the mind, and making future incorrect spellings more probable. The children are also asked indirectly to guess what thought is in the teacher's mind, and under such circumstances that any one of a half dozen answers would fulfill the conditions of the question equally well.

TOO MUCH DONE BY THE TEACHER.

I may be allowed to refer to another error which teachers, whatever may be their method of instruction, are liable to fall into, but much more in giving oral instruction, and especially the oral instruction connected with object lessons. The teacher

takes upon herself the burden of the work, and makes the ways of learning easy. She explains everything, and divides and subdivides every difficulty, until the weakest intellects find their way through it with little exertion. She sees for her pupils, and she thinks for them. The joy of finding out things for themselves, after a severe wrestle for it, those pupils can never know. The fact is, they grow daily less inclined to struggle with difficulties. No healthy glow comes to their minds from a vigorous exercise of their faculties. In other words, their minds are kept constantly in leading-strings, and are never allowed to go abroad unattended. This much talking either excites in pupils a high nervous tension, healthy neither to body nor mind, or they become entirely indifferent to it. They are, too, almost continually engaged in recitation, and have no time to steady down to quiet thinking. This exaltation of the importance of the recitation is one of the most striking changes in our educational methods. Formerly it played a very subordinate part to study; now it has in many schools become the almost all in all, study being quite crowded to one side. It might be a profitable question to consider, whether a partial return, at least, to the old land marks might not be to the advantage of sound acquirements. The result of so much talking and helping is, that pupils "are readily discouraged by obstacles, and are constantly referring to the teachers for explanations, seeming by habit to lean on their teachers whenever difficulties occur. They are rendered incapable of deep, persistent, vigorous thought, and seem equally incapable of hard, methodical, practical study." The wise teacher avoids this rock of disaster, by constant watch over herself—for the tendency in this direction is very strong. She talks no more than is sufficient to direct the minds of her pupils to their proper field of labor, and explains only such difficulties as her experience has shown her scholars can not without a waste of time overcome for themselves. In short, she teaches her pupils how to pry into nature and find out her wonderful secrets by using their own eyes and brains instead of those of their teacher.

COURSES OF STUDY IN NATURAL SCIENCE.

The tendency to diffuseness and want of system on the part of instructors who have adopted the new methods, has been greatly aggravated by certain courses of study in natural science, prepared for the lower schools. Natural science, in

these latter days, is a power to conjure with, and some school authorities, influenced to some extent, doubtless, by its popularity, have attempted to introduce an amount of it into their schools not warranted by correct principles of education. Science in the lower schools we ought to have and must have, but we can do nothing more in it there than to teach it in a tentative way, and make that teaching the basis for the true scientific methods of the higher schools. Says Prof. Thompson, of the Technical School at Worcester, Mass., certainly a high authority upon this subject:

"It seems to me that the work of the common school, in teaching physical science, must be limited to the study of the facts of the natural-history sciences. I do not see how any one can justify any attempt to introduce physical apparatus into this school. It can not serve any purpose but that of amusement, and this is a degradation of science."*

THE LECTURE METHOD.

Though not strictly within the province of my theme, I trust I shall be pardoned if I allude to some of the evils likely to attend the lecture method of instruction. Such a method can never serve the purpose of positive training. Such training can only be obtained through the active exertion of the pupil's own faculties, which this method does not encourage. The province of the lecture method is to stimulate the mind to the highest exaltation of its moral and æsthetic powers, not to train it by slow and often painful logical processes. It appeals to a trained athlete to apply his skill and strength to the accomplishment of a worthy purpose. Yet we have among us theoretical educational extremists who would introduce this method not only into our colleges, but would carry it into our high schools also. And some have gone so far as to contend that a method, virtually the same, is the proper one for the grammar school. There is nothing, in the opinion of such educationists, like keeping the mind well shaken up. The springs of their wild notions are two: (1) The natural reaction from a slavish subserviency to text-books; and (2) a sort of undeveloped belief that an education ought to be obtained without labor, and that the lecture method presents the most feasible

* After listening to the remarks made in the discussion which followed the reading of my address upon this statement of Prof. Thomson, I am quite convinced that the doctrine propounded in it is to be taken with many limitations—so many, indeed, as to render it rather an unfortunate citation for the support of the point I was endeavoring to establish.

means of accomplishing it. I think, however, all wise educators will agree that the method has, except to a limited degree, no place either in high school or college, and should be restricted to the university proper.

TEXT-BOOKS IN SECONDARY SCHOOLS.

Between the primary school with its oral methods and the university with its lecture system, there lies the great middle ground of the grammar and high schools, and in these two grades of schools are text-books most profitably used. In them is acquired not only the ability to use the faculties of the mind to the best advantage, but a thorough knowledge of how to get information out of books. But though this great middle ground is the ground where text-books are most profitable, it by no means follows that the methods of the primary schools are to be entirely discontinued. On the contrary, the same habits of close observation with reference to classification and generalization, the same accustomed grasp of the concrete illustration are to be applied to the investigations of the higher schools. The extreme to be avoided is of adhering to the concrete too long, of pottering around among dry facts in a Gradgrind kind of way, until the mind from the long disuse of the wings of fancy, loses the power of a bold flight into the higher regions of abstract reasoning and speculation. Nothing is so important to the young child in the beginning of its educational career as to feel solid ground beneath its feet at every step. Such a feeling gives confidence, boldness, and certainty. But the time comes when that child shall be called to grapple with thoughts not connected with material things, thoughts of the imagination, beautiful, grand, indistinct, and elusive; and with yet other thoughts of duty, of God, of immortality. Such thoughts he can not shut out of his mental world if he would, and ought not to shut out if he could. And as he shall grasp these thoughts firmly and define them sharply, insomuch shall he differ from the uneducated or miseducated. For the cultured mind not only sees the thoughts which are common to the general mind, in their correct and well-defined outlines, and in their harmonious relations to each other, but it becomes a seer, having visions of things invisible to the common sight—visions of things having but a remote connection, at most, with the facts of the external world.

THE COURSE TO BE PURSUED.

I have entered into this discussion, not to undervalue the new methods, for in them my faith grows more confident with increasing experience; but to call the attention of their friends to a fact they can not shut their eyes against—that the miserable slipshod way in which their principles are so often applied to the actual work of education, is bringing them into disrepute. What, then, is to be done? Shall we abandon the new and return to the old system? I should say not so; but for this miserable way we must substitute an intelligent one, for if we do not, we shall most assuredly fall back into the old slough from which we have as yet scarcely escaped. When teachers attempt to use the new methods without thought, or special preparation for their work, they are as the blind leading the blind. But these defects are not inherent in the object method. The contrast between the new and old methods can not be better set forth than has been done by Supt. Harrington, of the New Bedford (Mass.) schools, whom I have before quoted in this address. He says:

"A reform, a genuine, vital reform has of late years been circulating among our public schools; which, beginning in some of the great centers of population and educational enterprise, has gradually extended itself, steadily acquiring force as it has made progress, until it has recast the principles and reorganized the activities of most of the elementary schools; and it will not cease its beneficent sweep of influence until it has entered with renovating effects every schoolhouse within our borders.

"I say it has been a vital, as well as a genuine reform. For, under the old system, it was not alone that some studies were made paramount which were intrinsically well nigh useless, useful studies so prosecuted as to be defrauded of their efficiency, and subjects of indispensable value wholly exiled from the schoolroom—which defects might have been superficial and easily remediable, occurring through casual misapprehension of principle and misapplication of effort—but the animating spirit of our elementary instruction had become perverted and vicious. Or, rather, there was to be witnessed the grinding mill-work of custom, void of intelligent and fructifying life; so that no reform which did not begin with the central life springs of the instruction would be worthy of the name. That central renovation has taken place. Fresh and ennobling ideals, issuing forth in new conceptions of the relative values of the several studies, and a complete revision of the methods and aims of teaching, have secured fast hold of the public mind, have become ingrained in the conceptions of the great body of our teachers, and are making glorious way."

How, then, shall the errors arising from a misapplication of

the principles of the new method, which it has been the purpose of this paper to point out—errors which arise chiefly from the ignorance of the teacher—be corrected? Clearly, there is but one way—teachers must prepare themselves for the work. They must, where opportunities are afforded, hear lectures on science to learn scientific methods; and where such opportunities are not available, then a better institution—the teacher's institute—should be brought under contribution. I say a better institution with the reservation that that institution is wisely conducted, and taught by instructors who know their business, otherwise it is a snare which only serves to entrap a dollar or two of the hard-earned money of confiding and poorly paid teachers—"this and nothing more." "Teachers must also provide themselves with sound and accurate books to guide them in studying nature; they must by learning, reading, and seeing, fit themselves by slow degrees to teach. For there must be no 'hearing lessons' from books, in this work. The teacher is to keep—not bring—her pupils in sympathetic contact with nature."*

THE NORMAL SCHOOL.

I have purposely left the most effective means to the last—the normal school. Of the value of this great instrumentality for fitting teachers for their work, whether that work be done by new methods or by old, it is not necessary for me to speak, for if there is one point on which all intelligent educators—both in this country and in Europe—are agreed it is as to the supreme value of schools for the professional training of teachers.

So our discusssion ends, as all educational discussions must end, whatever the theme, with the teacher as the great central figure; and all systems of schools, courses of study, and methods of instruction will depend for their efficiency upon the skill with which this teacher directs their forces.

—— SINCE speech is the natural and original form in which mind manifests itself, no book can rival it. The living word is the most powerful agent of instruction, though cheap printing has rendered books the most convenient means of education.—DR. ROSENKRANZ.

* Prof. Thompson.

ARISTOTLE AND EDUCATION.

Aristotle was born nearly four centuries before Christ, at Stagira, a city on the coast of Thrace. He came to Athens while yet in his teens, impelled by the love of learning and attracted by the genius of Plato. He became a disciple of the great philosopher, and soon distinguished himself for industry and ability. Plato called him *the mind* of the academy. With what a copious flow the stream of eloquent instruction must have run from such a master to such a pupil! The enthusiastic teacher will credit the tradition which affirms that when Aristotle happened to be absent from the lecture, Plato appeared spiritless, and complained that he spoke to deaf auditors.

Aristotle remained in Athens for about twenty years, devoting himself to study and philosophical pursuits. Shortly after Plato's death, which occurred 338 A.D., he removed to the Mysian city of Atarneus, where he spent three years at the court of Hermeias, his friend and fellow-student,—a philosopher-king. Hermeias, falling into the power of the king of Persia, was taken prisoner, sent to Asia, and hanged; and Aristotle fled for safety from Atarneus to the isle of Lesbos. He was accompanied in his flight by Pythias, sister of Hermeias, whom he had just married, and whom he is said to have loved with an extravagant passion. Pythias died within a year or two, and Aristotle soon afterward sailed to Macedonia, on the invition of Philip, to undertake the education of the prince, afterward Alexander the Great. Philip and Aristotle were intimate in boyhood, and they continued life-long friends. Upon the birth of Alexander, the king had sent the philosopher this message:

> "Know that a son is born to us. We thank the gods for their gift, but especially for bestowing it at the time when Aristotle lives; assuring ourselves that, educated by you, he will be worthy of us, and worthy of inheriting our kingdom."

Alexander was fourteen years old, and Aristotle about forty, when they first came together in the relation of pupil and tutor. This relation continued for eight years, and we may conjecture that it was of no small benefit to Aristotle, as affording preparation for his future work. By imparting knowledge to others, we establish it in ourselves. What finer culture can be imagined than to be taught by Plato and to teach Alexander!

Aristotle, ripened by years and a varied experience, returned to Athens and established his celebrated school in the lyceum. This lyceum was a "gymnasium in the suburbs, well shaded with trees, near to which the soldiers used to exercise, and adorned by the temple of Lycian Apollo, from whose *peripaton*, or walk, Aristotle and his followers were called Peripatetics." Aristotle, like other teachers of antiquity, had two forms of lecture, *acroatic* or *esoteric*, and *encyclic* or *exoteric*. The acroatic lectures were set discourses addressed to his regular pupils, and were read in the morning at the lyceum. The encyclic discourses were on the same or similar topics as the acroatic, but were popular in style and adapted to the general learner. They were truly peripatetic lectures or talks, being given informally after supper, and while walking about for exercise of body and relaxation of mind. Only the acroatic treatises have come down to us, and they in a mutilated condition.

For a period of thirteen years, Aristotle continued to instruct the young men of Athens in the science and philosophy of his age. His splendid career then drew to a dreary close, as the sun sets in gathering clouds. Like Socrates he was accused before the Areopagus of irreligion; like Socrates he was misrepresented and persecuted,—and recalling the fate of Socrates he went, self-banished to Chalcis in Eubœa, to prevent the Athenians, as he sadly said, from committing a second sin against philosophy. He died, in Eubœa, before the expiration of a year, at the age of sixty-three.

It was inevitable that a man of Aristotle's associations and pursuits should consider deeply the subject of education. He did so, and some of his conclusions on this subject may easily be gathered from his preserved writings. There is a severe unity binding together his treatises on Ethics and Politics, and by reading these works, we learn his conception of man and the training that fits man for his highest duties and truest happiness.

According to the ethics of Aristotle, the soul is capable of two kinds of virtue, moral and intellectual. *Moral virtue* rules that part of our nature which is most closely connected with the body,—the instincts, appetites, and passions. It is not innate. It is not produced by nature nor contrary to nature. The soul is passive to external influences. Moral virtue is simply habit. It is impressed by examples, by acts, by whatever may reach the mind through the senses; and the impression is deepened

by practice. If the tablet of the child's mind is not strongly inscribed with the characters of moral virtue, vice will write possession there. Hence the circumstances under which children are brought up are all-important, and parents, families, and states are responsible for their education until they reach the years of accountability. Children are incomplete, and their virtue is referable not to themselves, but to their guardians. Adults are free agents, and their conduct should submit to the control of reason.

Intellectual virtue belongs to that part of our being which is farthest removed from the dominion of sense. It relates to the powers of thought and contemplation. The intellect is the noblest thing in man,—it resembles the divine. Intellectual virtue is not a mere habit like moral virtue, but it "has its origin and increase for the most part from *teaching*," and requires time and experience for its development. It is dependent upon moral virtue, however, as the seed is dependent upon the cultivation of the soil. Intellect grows thriftily only out of a moral soil. Goodness predisposes to right reasoning. The object of intellectual virtue is the discovery of truth, and Aristotle gives it as the distinguishing mark of a good or moral man, that "he can see the truth in every case, since he is, as it were, the rule and measure of it." This is a restatement of one of Plato's ideas.

The exercise of the virtues, moral and intellectual, has for its end the supreme good of the individual by bringing him to a condition of almost perfect and constant happiness in the delightful contemplation of truth. But the individual does not exist for himself alone, he exists for the state. "To discover the good of an individual is satisfactory, but to discover that of a state is more noble and divine." In Aristotle's system as in Plato's, education is regarded as a public duty. "No one ought to think that any citizen belongs to him in particular, but to the state, and it is the natural duty of each part to regard the good of the whole." Aristotle's treatise on Politics applies to the state the same principles that his Ethics applies to men. The good citizen is described as not essentially different from the virtuous man. Politics, which is the greatest of sciences, should direct the citizen in all things that tend to a correct life according to a fixed ethical rule. "It is evident that laws should be laid down for education, and that it should be public." The laws must prescribe such regulations as will

secure in the young those habits which confirm moral virtue, and predispose the mind to intellectual pursuits. Further, they must dictate what individuals shall learn, and to what extent.

(*To be continued.*)

Cincinnati, O. W. H. VENABLE.

EDUCATIONAL NOTES.

No. VI.—SYSTEM IN ADVANCED INSTRUCTION.

A little child, moved by the activity of its senses and its æsthetic nature, flits from fact to fact like a butterfly among the garden flowers. As he advances in his mental culture, he begins to compare objects, to notice the likeness and unlikeness of things, and to arrange them into systems and classes. The mind, which before was satisfied with isolated facts, becomes interested in connected truths. It grows weary of concrete objects, and looks for the idea behind them, or enshrined within them. Things become the ladder to thoughts, and the child now rises to the apprehension of systems and laws. It therefore follows that, though primary instruction need not concern itself with the relation and orderly arrangement of things, that,—

II. ADVANCED INSTRUCTION SHOULD BE SYSTEMATIC.

Nature is our teacher here, as in primary instruction. To the child-mind, isolated facts are a necessity; the older mind finds pleasure in the relations of things, and searches for the thread by which they are bound together in orderly arrangement. Nature has adapted herself to both of these educational requirements. She presents her facts in artistic unsystem, as a child delights to find them; but in each individual object she is as orderly as an English scientist. A tree is as systematic and logical in its structure as a demonstration of Euclid. Like a good housewife, Dame Nature has a place for everything and keeps everything in its place. In every product of her hand there is a logical unfolding of ideas; an arranging of subordinate thoughts around central ones, to which they relate and out of which they grow. Science is but the discovery of the relations and system of nature. The naturalist does not create his classes; he finds them ready made to his hand. Nature

had classed the plants before Linnæus or Jussien; she had arranged the animals in genera and species previous to the days of Cuvier. Though, on the surface, for the first steps in education, she presents her facts in attractive disorder, yet beneath the surface, for the maturer mind, she develops her ideas with completest system and in the most "logical order."

From the indications of the child's mental nature and the educational provisions of the material world, it is seen that the instruction should deal more with the relations of knowledge, as the child advances in its educational course. The neglect of this principle has been productive of more harm than the disregard of the previous one, for it has been much more general. Teachers have been characterized by their lack of logical method. Much of the instruction of the schoolroom is as disorderly as the arrangement of a child's playroom. The mind has too often been regarded as an intellectual chest or box, and knowledge was put into it with about as little regard to order, as coal is shoveled into a coal-bin. Sciences were taught like a piece of patchwork rather than a fabric beautifully woven of continuous interlacing threads. Logical teaching is like the unraveling of a knit garment; keep hold of the thread and you can follow it in all its devious wanderings to its starting point. So the systematic teacher may unfold the various branches of knowledge, tracing his way from point to point by the thread of related thought. The advantages of such instruction may be formally stated under several distinct heads.

1. *Systematic teaching aids in the acquisition of knowledge.* Pupils learn much more readily when they see the relation of the facts they are committing. The law of correct instruction is from the known to the unknown; but this transition is much more easy when the unknown is logically united with the known. To the mind of the pupil there is a charm between the known and the unknown; show their relation and you bridge the chasm, and the pupil steps across with willing and easy feet. In systematic instruction, one thing suggests another and gives meaning to it. The fact just acquired points to another; that suggests the following to which it is related; this new one another, and so on, making the path of acquisition an easy one. In this manner one idea becomes the pioneer of another idea, and this of another, and thus led forward in

the search of truth, we are enabled to penetrate with ease that which seemed difficult and dark. All good teaching should be thus suggestive. The known should be the stepping-stone to the unknown; the acquisitions of to-day should point us forward in the pathway by which we travel to the acquisitions of to-morrow. As the captive bird gathers about it the free birds of the air for the sportsman's net, so the new ideas should come circling about the old that they may be caged in the mind together. In such instruction, the known becomes the lamp to guide our feet into the domain of the unknown; the old is the interpreter of the new, giving it a meaning and an importance that the isolated fact never possesses.

2. *Systematic teaching aids in the retaining of knowledge.* There is a law of retention as well as of acquisition. The memory acts by the law of related ideas; it holds its possessions by the attractive influence of association. Isolated facts are with difficulty kept in the mind; like riches they are liable to take unto themselves wings and fly away. There must be a companionship of ideas that they may abide with us. Birds of a feather not only flock together, but remain in company. To keep the ideas we are acquiring, they must be associated in congenial companionship. The new must be tied to the old by the thread of classification. Classification is a hitching-post, or rather the halter by which we fasten our knowledge. When the relation of truth is clearly seen, there seems to be no effort to remember; like the little boy's whistling, it remembers itself. Relation acts like an attractive force in the domain of mind. As the loadstone draws iron by the mysterious influence of magnetism, so the knowledge of yesterday by the attractive force of resemblance, seems to draw to itself the knowledge of to-day. Thus the acquisitions of the past become the nucleus of the acquisitions of the present and the future. This principle of mind has its analogy in the material world. The law of order in the physical universe is a central sun and revolving planets; and the law of orderly and permanent arrangement of knowledge is the grouping of subordinate ideas around central ones of the same system. In this way truth differentiates itself; ideas fall into their proper places, and revolve in their proper orbits. When, from the clear light of some general and central truth, we can look out upon the related truths which, in the beauty of logical order, revolve around them, we feel that our possessions are permanent, and have no apprehen-

sions that they will fly away from their orbits and be lost to us.

3. *Systematic teaching gives facility in the reproduction of knowledge.* The memory retains by association and recalls by suggestion. When ideas are united by the thread of logical relation, one arising in the mind, calls up another with which it has been associated. The old illustration of the bunch of grapes is always appropriate; get hold of one grape, and, if the connection is sufficiently strong, you will pull out the whole bunch. Tie your ideas together with the thread of logic, and they will come up in the mind in clusters. String them upon the thread of relation, and you can pass from one to another as we number the beads of a necklace. It is only in this way that a person is master of his knowledge and can command his thought. The mind may be stored with the treasures of learning without the ability to communicate it to others. The facts of history may lie in the memory a chaos "without form and void"; classify them and they form themselves in groups, fall into their appropriate places, and lead each other out into the clear light of consciousness. The uncultivated mind may have acquired, by travel or reading, vast stores of facts which can only be brought forth by questions; put these same facts in a well-trained memory, and they will come forth in thrilling narrative or attractive pictures.

The gift of extempore speaking lies to a great degree in the suggestive power of related thought. The logical speaker is generally the best extemporizer, and logical subjects are the easiest to discuss. The speaker who has no logical order, is never sure of himself. If he speaks without his outline, trusting to utter that which chances to pop up in his mind for the occasion, he may find himself in the embarrassing condition in which they won't pop at all. We think with the most ease when we think from the stand-point of broad generalizations, which unite in their group many subordinate truths. When we can string our facts and illustrations on the thread of a general principle, we can readily follow this thread in the unfolding of the subject which we are discussing.

4. *Systematic teaching prepares for the evolution of original thought.* Trained to perceive the relation of acquired ideas, the mind will naturally begin to compare and discover new relations; accustomed to the habit of suggestive memory, it will unconsciously fall into the habit of suggestive thought. Ideas will begin to lead out, not only similar acquired ideas, but similar

new ones. In this manner we rise gradually to the sphere of creative thought. The old will be the herald of the new; the facts of memory will become the germs of the understanding; and original ideas and truths will come forth from the mysterious alembic of the human mind.

With advanced classes, therefore, let the instruction be thoroughly systematic. Let the sciences be taught like a carefully woven fabric, and not like an old-fashioned piece of patchwork. Let us build up a science in the mind of the pupil, not as children erect a pyramid of chips or corn cobs, but as nature develops from the germ the delicate flower or wide spreading tree. The learning of a science should be a growth, and not a mere aggregation of parts. Let the teacher "consider the lilies of the field, how they grow." The little seed takes in the material of the soil, and works it up into a form of symmetry and beauty. The plant puts on its leaves, not by chance or fancy, but by a law so definite that it will admit of mathematical expression. Petals and sepals, and stamens and pistils, are not thrown heterogeneously together according to accident or the whim of the moment, but their number, position, and arrangement are the outgrowth of a central, controlling idea of harmony and order, working even from the germ of the seed. A flower is a perfect embodiment of a logical thought, and is a type of the teacher's best work. He should teach as nature builds, and the pupil should learn as nature grows. There are logical threads running through the sciences, and the pupil should be led to find them that he may unravel science as he would a stocking for yarn to make balls of. He should be led to grasp the general principles which bind the sciences together in harmony and unity that they may be thus unfolded to his own mind. Topical recitations should be required in which the facts are to be grouped under appropriate heads; logical outlines exhibiting the relation of the various parts should be studied and understood. Heedless of system in primary instruction, with more advanced pupils the teacher should lead the mind of the learner up from the isolated fact to the comprehending law, and teach the young knee that had bowed at the shrine of the Beautiful Disorder to bow at the more excellent shrine of the Logical Order.

EDWARD BROOKS.

State Normal School, Millersville, Pa.

ASKING QUESTIONS.

To be successful, the teacher must understand the art of questioning. He should make it a study. Let him take some little children and practice upon them, and he will soon see how much the teacher's success depends upon skillful questioning. It is this that draws out, or educates, the mind. It sets it to work, develops its latent powers, and reveals to itself and to others what it knows and what it does not know. Socrates was a great teacher, because he thoroughly understood this art. He taught and imparted knowledge by asking questions.

A few suggestions on this subject may be useful to the young teacher:

1. Do not confine yourself to the questions in the book, nor should you neglect them. Study them before-hand, so that you can give them in about the form and order given in the book, and then look at the scholar and ask them. Vary the form of the question frequently. You can thus ascertain whether the subject is mastered in thought, or the answer merely learned in a parrot-like way to match a certain question.

2. Avoid as much as possible questions that can be directly answered by "yes" or "no." The following are examples: "Is London the capital of England?" "Is the multiplier always an abstract number?" It requires no effort to answer such questions. It would be just as sensible to say, "London is the capital of England, *isn't it*?"

3. Avoid questions which indicate in any way whatever the answer. The following are examples: "Is the multiplier an abstract or a concrete number?" "In order to divide a fraction by a fraction, what do you do to the divisor?" In the first question, the two words or ideas are given, and the pupil simply has to choose between them. In the second question, a part of the process is suggested by speaking of the divisor. Children are very quick to catch anything in the look, or tone, or words of the teacher that will help them to an answer. They will only partially commit themselves, and then will watch the teacher's face to see if they are on the right track. Avoid everything that will help them to determine whether they are right or not, until they are fully committed to an answer.

4. After you have asked a question, do not help the pupil by any such device as suggesting the first word of the answer, or the first letter of the word. If he can not give the answer

without any such help, he has not learned it, and should not be encouraged to think that he has. Whatever help he can give his memory by associating the answer or its first word with something else, he is entitled to, but the teacher should not do the work for him. If a child is studying the map of Italy and trying to fix its outline in his mind, you can tell him that it resembles a boot, and can teach him to trace out resemblances of that kind. But when he comes to recite and you ask him to describe the shape of Italy, it will not do for you to help him to an answer by suggesting a boot.

5. Put your questions in such a shape as will best draw out the pupil's knowledge or reveal his ignorance. To do this you must use all the tact, judgment, and common sense which you can command. If you wish to show a pupil that he has given a wrong answer without telling him so directly, you can frequently do it by a second question. If he gives an answer that belongs to another question, ask him that other question. A little skillful questioning will show him his blunder, and lead him to correct it, if he knows enough, or else it will reveal to himself and others his utter ignorance of the subject.

6. After you have asked a question clearly and distinctly, do not repeat it, unless it be so long and intricate that the pupil can not remember it from hearing it only once.

7. Encourage your pupils to ask questions. A child's mind is an interrogation point, and the teacher or parent who does not encourage its asking questions, deprives it of a part of its education. A good teacher will show his skill in the manner in which he treats questions asked by his pupils. He will frown upon any disposition to ask questions that are intended to puzzle the teacher or to create a laugh in the class. He will deal carefully, not generally discouraging, questions that are asked by a pupil to pave the way for telling something that he happens to know on the subject. If any one asks an honest question that is so simple or funny as to make the class laugh, he will, if possible, refrain from laughing himself, repress the laughter of the class, and answer the question so as to remove the difficulty in the pupil's mind. We should all know vastly more than we do, if we were less afraid to ask questions, and one great reason why we are afraid is, because our questions are so often treated with contempt.

If a question is asked which you can not answer honestly, own your ignorance, and let some one in the class answer it, or

tell them that you will look it up as soon as possible. Do not pretend to know more than you do. It is hard work sometimes to acknowledge our ignorance, but it is better than to be dishonest. If you are frank about it, your scholars will have more confidence in you when you tell what you do know. It will do them no particular harm to learn that their teacher does not know everything, although it may dispel a natural childlike illusion. But be very careful not to be caught in ignorance on any thing that may be known from the text-book. A teacher is very much lowered in the estimation of his pupils if he fails to perform or to demonstrate an example, or to point out a locality on the map. By the most thorough preparation the teacher should guard against being compelled to own ignorance on such points.

R. T. Cross.

PEN OR PENCIL IN FIRST WRITING LESSONS.

Mr. Editor. In a late number of your journal a correspondent asks, "Which is the better for small children to use in their first lessons in writing, a lead pencil or a pen? In reply, permit me to give our experience in the lower grades in the schools of this village.

We first used pen and ink, but, with all the efforts of the teacher in charge, little satisfactory progress was made. The children would quite frequently blot their books, and their writing was very stiff and awkward, owing, as it seemed to us, to the restraint that children always feel when they first use pen and ink.

We finally abandoned the plan, and tried writing on slates. For this purpose we had all the slates ruled, leaving proper spaces between the lines, and the children provided with *long* slate-pencils, which they were required to hold as correctly as possible while writing. A few used lead pencils and loose paper. An easy copy of elements or principles was written on the blackboard, spaced similar to the slates. The lesson was explained to the children, after which they wrote carefully for about twenty minutes. There was less restraint than when pen and ink were used, and much more satisfactory progress was made by all the pupils. After using slate or lead pencil for one term, the pupils then begin to write with the pen.

North Amherst, O. S. P. Merrill.

EDITORIAL DEPARTMENT.

—— No one interested in the improvement of American teaching, will complain of the length of the opening paper in this number. The fact that the writer is an earnest advocate of the objective method, in its proper sphere, gives weight to his remarks on the abuses of the method. The errors pointed out will certainly be recognized by those at all familiar with school instruction, as prevalent abuses of this much-abused method. Mr. Hancock hits the nail squarely when he affirms that the best methods of teaching generally require the wisest and most skillful teachers, and hence the remedy proposed for the evils noticed, is the only one that can prove effective. *The schools must be supplied with trained and well-prepared teachers.*

—— Mr. Hancock also defines with commendable clearness the limitations of oral instruction. We have long believed that the attempt to banish text-books from American schools will prove a failure, and for two sufficient reasons. American teachers as a class are not qualified to use the oral method exclusively—a necessary result of their temporary service—and, if they were, such teaching would not secure the best possible results. When school life ends, nine persons out of ten must depend largely on books for an increase of their knowledge of science, history, literature, politics, etc. Books are their cheap and efficient teachers, provided they know how to study the printed page. A constant and exclusive dependence on the living teacher in school days is a poor means to this end. A pupil who leaves school with no habits of independent study, will, as a general rule, learn little from books in after life. If he reads at all, he will select very "light" literature and that of an emotional character. The old memoriter methods of study too often disgusted children with books; exclusive oral instruction will seal to them all books requiring thoughtful reading or study.

—— The above remarks justify the repetition of what we recently stated, that the great problem in American teaching is *the complete and natural union of the oral and text-book methods.* There are indications of an approach to the practical solution of this important problem. Within a few years the two methods have been united, more or less completely, in teaching the elements of several branches, the oral lessons being designed to *prepare* the pupil for the intelligent study of the text-book. The two courses have been too often separated, the oral wholly preceding the text-book. Formerly this mistake was very widely made in teaching arithmetic, oral or "mental" arithmetic being taught separately from written, and with little reference to it. Intelligent teachers have generally learned that this is an error; that there should be a close

and thorough union of the two methods at every step. In the primary school and the university (real) instruction should unquestionably be more largely oral than in the intermediate schools, the indirect or catechetic method being best adapted to the primary school and the direct or lecture method to the university. In the lower secondary schools (grammar) the oral lesson should precede and prepare the way for the text-book or written. In the high school and college, the study of the text-book may generally precede oral instruction, the latter thus supplementing the former. This is easily accomplished in the recitation. The above is an imperfect statement of what seems to be the drift of the practice of the best American schools. While the two methods are conjoined throughout, the manner of uniting them varies in the different grades of schools.

—— We referred last month to the criticisms on Dr. Clarke's recent work on "Sex in Education" and now add that a careful reading of the work shows that many of these criticisms are surprisingly unjust. The doctor's positions have been strangely misunderstood and misrepresented. He neither opposes the equal education of the sexes, nor their coëducation, so far as time and place are concerned; but he does present the earnest protest of physiology against "*identical* coëducation", by which he means "the education of boys and girls at the same time, in the same place, by the same faculty, with the same methods, and *under the same regimen.*" He presents the demands of physiology that the school regimen to which a girl is subjected, when she is passing through the first of the two critical epochs of a woman's life, should recognize her sex organization and permit an intermission, if not an abstinence, of severe study or effort during the catamenial period of each month. When the reproductive system is fully developed, and the catamenia are established, there is less necessity for this periodicity of effort and rest, and a woman's labor may then be more constant and regular. This position is sustained by a most convincing array of arguments and facts, both physiological and clinical, and we do not see how any candid reader can characterize it as "a mere hasty assumption." While we can not accept all of Dr. Clarke's conclusions, concerning the coëducation of the sexes, we most heartily commend his book to every parent and teacher. It ought to be universally read.

—— A recent number of *The Massachusetts Teacher*, contains an interesting paper by Supt. Philbrick, of Boston, on "Education at the Vienna Exposition." He states that nearly every European government, except that of Great Britian, made liberal provision for the proper presentation of means, appliances, and results of their educational systems, Austria taking first rank, both for extent and excellence, and Germany standing next. The United States stood better in the educational group, than in any other, with the possible exception of that comprising machinery. Of the four national model schoolhouses exhibited, the Swedish was by far the most complete and beautiful, and the American

Aristotle, ripened by years and a varied experience, returned to Athens and established his celebrated school in the lyceum. This lyceum was a "gymnasium in the suburbs, well shaded with trees, near to which the soldiers used to exercise, and adorned by the temple of Lycian Apollo, from whose *peripaton*, or walk, Aristotle and his followers were called Peripatetics." Aristotle, like other teachers of antiquity, had two forms of lecture, *acroatic* or *esoteric*, and *encyclic* or *exoteric*. The acroatic lectures were set discourses addressed to his regular pupils, and were read in the morning at the lyceum. The encyclic discourses were on the same or similar topics as the acroatic, but were popular in style and adapted to the general learner. They were truly peripatetic lectures or talks, being given informally after supper, and while walking about for exercise of body and relaxation of mind. Only the acroatic treatises have come down to us, and they in a mutilated condition.

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According to the ethics of Aristotle, the soul is capable of two kinds of virtue, moral and intellectual. *Moral virtue* rules that part of our nature which is most closely connected with the body,—the instincts, appetites, and passions. It is not innate. It is not produced by nature nor contrary to nature. The soul is passive to external influences. Moral virtue is simply habit. It is impressed by examples, by acts, by whatever may reach the mind through the senses; and the impression is deepened

by practice. If the tablet of the child's mind is not strongly inscribed with the characters of moral virtue, vice will write possession there. Hence the circumstances under which children are brought up are all-important, and parents, families, and states are responsible for their education until they reach the years of accountability. Children are incomplete, and their virtue is referable not to themselves, but to their guardians. Adults are free agents, and their conduct should submit to the control of reason.

Intellectual virtue belongs to that part of our being which is farthest removed from the dominion of sense. It relates to the powers of thought and contemplation. The intellect is the noblest thing in man,—it resembles the divine. Intellectual virtue is not a mere habit like moral virtue, but it "has its origin and increase for the most part from *teaching*," and requires time and experience for its development. It is dependent upon moral virtue, however, as the seed is dependent upon the cultivation of the soil. Intellect grows thriftily only out of a moral soil. Goodness predisposes to right reasoning. The object of intellectual virtue is the discovery of truth, and Aristotle gives it as the distinguishing mark of a good or moral man, that "he can see the truth in every case, since he is, as it were, the rule and measure of it." This is a restatement of one of Plato's ideas.

The exercise of the virtues, moral and intellectual, has for its end the supreme good of the individual by bringing him to a condition of almost perfect and constant happiness in the delightful contemplation of truth. But the individual does not exist for himself alone, he exists for the state. "To discover the good of an individual is satisfactory, but to discover that of a state is more noble and divine." In Aristotle's system as in Plato's, education is regarded as a public duty. "No one ought to think that any citizen belongs to him in particular, but to the state, and it is the natural duty of each part to regard the good of the whole." Aristotle's treatise on Politics applies to the state the same principles that his Ethics applies to men. The good citizen is described as not essentially different from the virtuous man. Politics, which is the greatest of sciences, should direct the citizen in all things that tend to a correct life according to a fixed ethical rule. "It is evident that laws should be laid down for education, and that it should be public." The laws must prescribe such regulations as will

secure in the young those habits which confirm moral virtue, and predispose the mind to intellectual pursuits. Further, they must dictate what individuals shall learn, and to what extent.

(*To be continued.*)

Cincinnati, O. W. H. VENABLE.

EDUCATIONAL NOTES.

No. VI.—SYSTEM IN ADVANCED INSTRUCTION.

A little child, moved by the activity of its senses and its æsthetic nature, flits from fact to fact like a butterfly among the garden flowers. As he advances in his mental culture, he begins to compare objects, to notice the likeness and unlikeness of things, and to arrange them into systems and classes. The mind, which before was satisfied with isolated facts, becomes interested in connected truths. It grows weary of concrete objects, and looks for the idea behind them, or enshrined within them. Things become the ladder to thoughts, and the child now rises to the apprehension of systems and laws. It therefore follows that, though primary instruction need not concern itself with the relation and orderly arrangement of things, that,—

II. ADVANCED INSTRUCTION SHOULD BE SYSTEMATIC.

Nature is our teacher here, as in primary instruction. To the child-mind, isolated facts are a necessity; the older mind finds pleasure in the relations of things, and searches for the thread by which they are bound together in orderly arrangement. Nature has adapted herself to both of these educational requirements. She presents her facts in artistic unsystem, as a child delights to find them; but in each individual object she is as orderly as an English scientist. A tree is as systematic and logical in its structure as a demonstration of Euclid. Like a good housewife, Dame Nature has a place for everything and keeps everything in its place. In every product of her hand there is a logical unfolding of ideas; an arranging of subordinate thoughts around central ones, to which they relate and out of which they grow. Science is but the discovery of the relations and system of nature. The naturalist does not create his classes; he finds them ready made to his hand. Nature

had classed the plants before Linnæus or Jussien; she had arranged the animals in genera and species previous to the days of Cuvier. Though, on the surface, for the first steps in education, she presents her facts in attractive disorder, yet beneath the surface, for the maturer mind, she develops her ideas with completest system and in the most "logical order."

From the indications of the child's mental nature and the educational provisions of the material world, it is seen that the instruction should deal more with the relations of knowledge, as the child advances in its educational course. The neglect of this principle has been productive of more harm than the disregard of the previous one, for it has been much more general. Teachers have been characterized by their lack of logical method. Much of the instruction of the schoolroom is as disorderly as the arrangement of a child's playroom. The mind has too often been regarded as an intellectual chest or box, and knowledge was put into it with about as little regard to order, as coal is shoveled into a coal-bin. Sciences were taught like a piece of patchwork rather than a fabric beautifully woven of continuous interlacing threads. Logical teaching is like the unraveling of a knit garment; keep hold of the thread and you can follow it in all its devious wanderings to its starting point. So the systematic teacher may unfold the various branches of knowledge, tracing his way from point to point by the thread of related thought. The advantages of such instruction may be formally stated under several distinct heads.

1. *Systematic teaching aids in the acquisition of knowledge.* Pupils learn much more readily when they see the relation of the facts they are committing. The law of correct instruction is from the known to the unknown; but this transition is much more easy when the unknown is logically united with the known. To the mind of the pupil there is a charm between the known and the unknown; show their relation and you bridge the chasm, and the pupil steps across with willing and easy feet. In systematic instruction, one thing suggests another and gives meaning to it. The fact just acquired points to another; that suggests the following to which it is related; this new one another, and so on, making the path of acquisition an easy one. In this manner one idea becomes the pioneer of another idea, and this of another, and thus led forward in

and, if people will cherish them, *let them pay the cost.* No colored child should be denied the advantages of the public schools on account of prejudice against his race.

—— The annual report of Supt. Andrews, of Steubenville, O., for 1873, states that in many of the schools there was not a single case of corporal punishment, and there were but few cases in the other schools. He thinks that such punishment should be the last resort before expulsion, and that "it should never be inflicted in the presence of the school." Supt. Henkle states that most of the cases of corporal punishment in the Salem schools for 1873 were reported by teachers who had never taught before. While he believes that "on rare occasions corporal punishment is inflicted by teachers of superior governing ability", he indorses and commends the educational aphorism: "*The maximum of punishment of any kind shows the minimum of ability on the part of a teacher in the government and control of pupils.*" Supt. Wiles, of Zanesville, reports a continued decrease in the number of cases of corporal punishment, and he recommends its total abolition, with the adoption of suspension from school as a substitute. But the most suggestive testimony on this subject is given by Supt. Moulton, of Oberlin. He states that the most noticeable change in the schools the past year was the result of a praiseworthy effort to elevate the moral standard of the schools by heart and conscience culture. He believes "that the public opinion of the schools is now such that a pupil can not lie or use profanity without incurring the scorn or losing the respect of his fellow students." The influence is seen in the improved discipline of the schools. There were but four cases of corporal punishment and one of suspension in the year, and there has been but one case of corporal punishment and not a suspension the first six months of this year.

EXPULSION FROM SCHOOL.

In discussing the subject of school discipline, several writers have proposed that expulsion from school be made a substitute for corporal punishment. Whenever a pupil refuses to obey the regulations of the school, or by lawless conduct subverts good order and wholesome discipline, it is urged that he should be summarily cut off from school privileges.

Unquestionably there are many cases where it is better to suspend a pupil than to attempt to bring him into subjection by bodily chastisement. A lawless rowdy who attends school for the purpose of making a disturbance, should ordinarily be "shown the door." Our schools have been too often disgraced by "pitched battles" between teachers and such characters. As a general rule, suspension is doubtless better than corporal punishment in the discipline of pupils old enough to appreciate school advantages.

There are also in almost every community children so corrupted and

spoiled by evil home influences, by neglect or injudicious management, that other children can not associate with them without danger of contracting moral pollution. The mild discipline and moral influences of the school, thus counteracted at home, often prove wholly ineffectual, and even severe punishment fails to effect the desired reformation. In such cases expulsion may be the only means of protecting the other pupils and maintaining necessary discipline. Yet we shrink from the contemplation of what may be the future of these depraved children thus driven into that worst of all schools, ever open to receive them—the street! Have those who, in their capacity as teachers or school officers, are made the guardians and protectors of the rising generation, the right thus to doom a poor child, in reality, perhaps, more sinned against than sinning, to almost inevitable crime and destruction, until they have first exhausted all the means of reformation in their power? Clearly the expulsion of a pupil from a public school should be the last resort, and this ought to be followed by the committal of the expelled to a reformatory school where his moral recovery may be effected by proper influences and agencies. This should be the safeguard of expulsion.

We know what formidable difficulties there are in the way, what an outcry is raised against the violation of the rights of parents, etc., but the annals of criminal justice are full of warning examples of youthful delinquency and insubordination which finally culminate in enormous crimes. The plain, practical duty is to rescue these children from the ruin to which they are doomed when driven from the public school—a duty more sacred than parental rights forfeited by neglect or subverted to the destruction of the dearest rights of childhood, the rights of control and instruction.

We wish to add that even the temporary and conditional suspension of pupils should be very cautiously exercised, since it too often results in their withdrawal from school with its evil consequences. When the suspension is simply the reference of a pupil to wise and faithful parents for correction, it may be the best possible course to pursue. But to send a child to a home where there is neither control nor proper interest in his education, is usually a mistake. The suspension of small pupils is rarely necessary or justifiable.

EDUCATIONAL INTELLIGENCE.

—— When notified that a subscriber has failed to receive any number of this journal due him, we always remail it.

—— Switzerland has 7,000 primary schools attended by about 400,000 pupils. The education of children is obligatory in all the cantons except Geneva and Uri.

—— The *Philadelphia Press* says that a national college of the most advanced order for women will be established in Washington, in which will be taught all branches of learning, including theology, medicine, law, and the arts and sciences.

—— Prof. John M. Lanston, formerly of Ohio, one of the ablest colored lawyers in the country, has entered upon his duties as provisional president of Howard University, at Washington, the trustees holding Gen. Howard's nomination under consideration.——Prof. Edward Searing, of Milton College, has been elected State Superintendent of Public Instruction of Wisconsin.——Seventy-five students have entered the new Massachusetts Normal Art School, more than half of whom are ladies.

—— Mrs. Anna T. Randall Diehl has opened a school of Reading and Oratory at 1018 Arch Street, Philadelphia.——Rev. Dr. A D. Mayo gave an address at the late meeting of the Massachusetts Teachers' Association on "Normal and Training Schools and Their Graduates."—— Prof. L. S. Thompson, of Sandusky, O., has been doing acceptable institute work in Iowa.——Mr. Larkin Dunton is elected superintendent of the schools of Cambridge, Mass., at a salary of $4,000. He has been head-master of the Boston Normal School since its separation from the Girls' High School.

—— The Putnams announce the early publication of a volume on "The Education of American Girls", edited by Miss Anna C. Brackett, of New York, formerly principal of the Normal School of St. Louis. It will contain papers from representative women-teachers throughout the country, including reports of results of woman's work in Antioch, Oberlin, and Vassar colleges, and in the University of Michigan. Contributions are also expected from Miss Maria Mitchell, Mrs. C. H. Dall, Dr. Mary Putnam-Jacobi, and others. The volume will aim to show that, under proper supervision and a scientific systematizing of the routine of study, women are competent, physically and mentally, to carry on extended courses of study, and to attain an education equal in standard to that given to men.

Peoria, Ill., *December* 22, 1873.

—— The Fourteenth Annual Meeting of the National Educational Association will be held in Detroit, Michigan, on the 4th, 5th, and 6th days of August, 1874. The Governor of the State, the Mayor of the City, the State and City Superintendents of Public Instruction, and the Board of Education of the City of Detroit, have extended a very cordial invitation to the Association to meet in that place. Free use of the assembly halls has been proffered, and every effort will be made to secure a successful and profitable meeting. Announcements concerning programme, facilities for travel, hotel accommodations, etc., will be made in due season. S. H. White, *President.*

A. P. Marble, *Secretary.*

—— Boston has had quite a sensation over the election of several women as members of the School Board. Notwithstanding the decision of the city solicitor that women are not eligible to the office, the board accepted their credentials by a vote of 77 to 17 and admitted them to seats. The Mayor subsequently announced the standing committees,

assigning the ladies on the same terms as the other new members. The triumphant ladies are Miss Abby W. May, Miss Lúcia M. Peabody, Miss Lucretia Crocker, and Mrs. Ann Adeline Badger. Miss Crocker was, for several years, one of the faculty of Antioch College, Ohio, and Mrs. Badger is a graduate of Oberlin College, Ohio. We trust that the Ohio training and experience of these ladies may prove useful to them in their new position as directors of public education.

—— The only reference made to the schools in the last message of Governor Noyes, of Ohio, is the recommendation that one or both of the crippled State Universities be changed into normal schools of the higher grade. He says: "For the benefit of our common schools we want, most of all, normal instruction, and if the Ohio and Miami Universities were devoted to this purpose, with very little help from the state, I have no doubt they would be abundantly sustained." We have advocated this disposition of these institutions for years, and we believe it to be the true policy. But we do not wish to see either made a normal school if the state is not ready to give it an adequate support. Let us have a thorough normal school or none. The Governor also repeats the suggestion of last year that one of these institutions be changed to a preparatory department for the Ohio Agricultural and Mechanical College.

—— The annual report of the public schoolsof Columbus, O., for 1872–73 is a handsome volume of 288 pages. It contains the reports of the president of the board, of the clerk, of the superintendent, with accompanying statistical tables, and of the board of examiners; also time tables, questions for examination, a manual of the schools, and the course of instruction. President Loving ably discusses several questions of practical interest, including the proper age for admission of children to school, ventilation and light, oral instruction, and normal instruction. He maintains that seven years is the earliest age at which a child should be admitted to school, and exceptions should be made even at that age, when there is evident feebleness. Very young children are often injured by the confinement and restraint and the stimulation of the mental faculties, resulting from school requirements, though the forms of disease thus produced are commonly supposed to arise from faulty nutrition. He thinks that the fault of over-strain, which is apt to manifest itself most in the upper grades, often begins in the primary department. He urges that schoolrooms should be sufficiently warmed, whatever the cost, and that they, at the same time, should be supplied "with plenty of fresh air, without injurious draughts." He thinks that imperfect eye-sight, so common among young people, is occasioned by the improper manner in which schoolrooms are generally lighted. The seats should be so arranged that the light falling upon the white page, may be reflected away from and not into the eyes, and its intensity should be properly regulated. These suggestions by an eminent physician are certainly worthy of consideration. Supt. Stevenson's report is so full of facts and suggestions of interest that we much regret that we have not space to allude to several of the more important. It must

suffice, at this writing, to say that it very clearly shows that the Columbus schools are under the direction of a superintendent who thoroughly understands his business.

——THE inauguration exercises of the Ohio Agricultural and Mechanical College were held in the Senate Chamber, Thursday, January 8th, Mr. Horton, president of the board of trustees, in the chair. Mr. Joseph Sullivant, chairman of the executive committee, gave an interesting sketch of the history of the institution, which was opened on the 17th day of September, 1873. The college edifice is now completed, excepting a few minor details which do not interfere with its occupancy. The departments of Physics and Mechanics and Chemistry are in working order, although all of the apparatus ordered has not yet been received. The department of Mathematics and Engineering is supplied with the best instruments and all the other apparatus needed. The department of Geology, Mining, etc., is to receive the collection of the State Geological Survey. The institution will soon be well equipped for efficient work, and, with its able faculty, it is expected to take high rank. The report closed with an advocacy of the union of the *liberal* and *practical* in education. President Edward Orton then delivered his inaugural address, which received earnest attention and hearty approval. His subject was "*Industrial Education, Its Character and Claims.*" He repudiated the narrow meaning sometimes given to the term industrial education. The term includes both the practical and liberal education of the industrial classes which, in American society, are "the great mass of the American people", including even those engaged in professional pursuits. He stated that it was not the object of the institution to teach trades and occupations, but to teach those studies that pertain to *man as man* as well as those related to agriculture and the mechanic arts. He gave a broad and liberal interpretation of the act of Congress, and urged that the true interests of practical utility demanded that pure science, as well as applied science, be taught in the institution. The formal transfer of the keys to the president and faculty was followed by a brief address by Governor Noyes, which closed the exercises.

OHIO COLLEGE ASSOCIATION.—This Association held a meeting in the chapel of Otterbein University, Westerville, O., Dec. 29th and 30th, 1873, President Eli T. Tappan, of Kenyon College, in the chair. In the absence of the secretary, Prof. H. Garst, of Otterbein University, was elected secretary *pro tem.*

President J. H. Fairchild, of Oberlin College, delivered the opening address. Subject: "The English Universities." President Tappan read a paper on "Voluntary Attendance", and President W. H. Scott, of the Ohio University, followed with a paper on "Method of Examination."

President Tappan, in behalf of the committee, submitted a report on the dismissal of students, prescribing a form of certificate, and recommending that "no student be received from another college without a certificate of good standing, except by the consent of the college dismissing him", and providing further that "when a student is not in good

standing, and yet does not deserve a dishonorable dismission, such consent should not be withheld." The report was adopted.

President Godman, of Baldwin University, offered a resolution recommending the creation of a State Board of Examiners, "with sole power to examine and graduate the candidates for academic degrees", and that the practice of conferring honorary degrees be abandoned when such board has been constituted. After some discussion, the resolution was referred to a committee, consisting of Presidents Godman, Scott, and Orton, to mature a plan and report at the next meeting, which, upon the invitation of the faculty of Kenyon College, is to be held at Gambier.

Presidents Tappan and Fairchild were appointed a committee to report resolutions on the death of Dr. Howard, late president of Ohio University, and Dr. Talbott, president of Denison University.

The exercises were concluded by a lecture by Pres. W. D. Godman, of Baldwin University, on "The Aim of True Culture."

BOOK NOTICES.

VOLUME OF PROCEEDINGS OF THE NATIONAL EDUCATIONAL ASSOCIATION FOR 1873. Published by the Association.

This volume contains 272 pages, medium octavo size, and is bound in the same style as the previous volumes. In addition to the valuable papers read at the Elmira meeting, it contains full reports of the discussion of the paper of Edward Shippen, Esq., on the question of "Japanese Indemnity", of Dr. McCosh's paper on "Upper Schools", Prof. Atherton's paper on the "Relation of the National Government to Education", and President Eliot's report on a "National University." Brief reports of other discussions are also presented. The price of the volume, postpaid, is only $1.50. It can be obtained by addressing the chairman of the publishing committee, Prof. S. H. White, Peoria, Ill. The volume for 1872 can also be obtained of Prof. White. The price, postpaid, is $1.75.

KRUSI'S DRAWING. Analytic Series: in Six Numbers. Accompanied by a MANUAL FOR TEACHERS. By HERMAN KRUSI, A.M. New York: D. Appleton & Co.

This second series of Prof. Krusi's Drawing Books fully meets the expectations based on the first, the "Synthetic Series", favorably noticed in a previous number of this journal. The page and the drawings are larger than in the first series, and the designs are more elaborate. The copies, consisting each of several designs, occupy the upper half of the page—a very convenient arrangement. The designs in the first book are chiefly rectilinear forms; those in the second are formed largely of curved lines; those in the third consist entirely of vegetable forms, with irregular outlines; those in the fourth are the forms of the lower animals, including radiates, mollusks, etc.; those in the fifth are the forms of the higher animals; and the sixth book is devoted to the human figure. The prominence given to designs taken from the department of

natural history, secured for the series the hearty approval of Prof. Agassiz. These drawing books seem to us to be admirably adapted to the wants of public schools. Their use will afford a fine practice in outline and inventive drawing, and, at the same time, will cultivate habits of accurate observation and improve the taste for the beautiful in nature and art.

The accompanying "Manual for Teachers" contains full instructions, with many additional designs in geometrical and inventive drawing.

LIPPINCOTT'S MAGAZINE. An Illustrated Monthly of Popular Literature and Science. Philadelphia: J. B. Lippincott & Co.

The first two papers in the January number, "The New Hyperion" and "The Trianon Palaces", are profusely illustrated. These are followed by "The Wife's Revenge", "Japanese Fox-Myths", "Chester Harding, the Self-Made Artist", "The White Doe" (a poem), three more chapters of "A Princess of Thale", "Monte Carlo", "My Christmas Ball", "A Statue of Shakespeare", "Three French Marriages", and "Our Monthly Gossip", filled with short and lively articles on popular topics. The number is an assurance that the new volume will surpass all of its twelve predecessors not only in literary merit but also in mechanical excellence; and this is no faint praise when spoken of a magazine that has won as high a reputation as *Lippincott's*. The February number will contain the opening chapters of "Malcolm", by George Macdonald. We will furnish the NATIONAL TEACHER and *Lippincott's Magazine* for $4.00—the subscription price of the latter magazine.

THE ATLANTIC MONTHLY. $4 a year. Boston: H. O. Houghton & Co.

The new publishers announce their purpose to keep this sterling magazine equal to its old reputation, and the January number, one of the most attractive yet issued, is an assurance of their success. The important paper by Professor Agassiz against the Darwinian Theory contains the results of the studies of a long life, and presents the eminent author's most matured convictions. Whittier, Holmes, and Bayard Taylor are the poets of the number. Mr. Aldrich, whose story of "Marjorie Daw" took the edge off the panic, begins a Serial Story, "Prudence Palfrey." Mr. Charles Dudley Warner starts for Baddeck, and rambles on the way thither. Fox hunting in England is vividly described by Colonel Waring; and a story of the South-west is begun by Rev. Mr. Baker, the author of "The New Timothy." A substantial paper by David A. Wells on Local Taxation, and a curious account of the Dollar Symbol, serve to render the number well balanced.

THE INTERNATIONAL REVIEW. A Bi-Monthly Magazine for the Times. Prof. JOHN M. LEAVITT, Editor. Price, $5.00 a year. New York and Chicago: A. S. Barnes & Co.

The chief object of this *Review*, as announced by the publishers, is the sifting and telling treatment of the great questions of our age, above mere sect or party: literary, scientific, social, national, and religious. To this end it will bring to its pages the best talent of Europe and Amer-

ica, and seek to be a medium of communication for representative thinkers of the times. It will furnish guidance and information in pleasing and popular forms to practical men in business and the professions, uniting the solidity of the quarterly and the sprightliness of the monthly, avoiding extremes of heaviness and superficiality. The publishers also promise that "it shall never assail the divine authority of the Scriptures or the supremacy of our Constitution over a United Republic." The opening number (January) contains six articles of marked ability, as follows: I. Our Late Panic. II. Fires in American Cities. III. Deep Sea Explorations, by Dr. Carpenter, of London. IV. Universal Education, by Dr. Palmer, of New York. V. The Prussian Church Law, by Baron Franz von Holtzendorf, of Munich. VI. International Arbitration, by Dr. Woolsey, of New Haven. It is published in fine style.

THE AMERICAN NATURALIST has been so fully and favorably noticed in these pages, that we can not well add anything to the strength of our commendation. We need only assure our readers that it continues to be conducted in admirable manner, and that its contents are reliable, standard, fresh. It is a repertory or year-book of progress in natural history for teachers and general readers. We hope that the friends of natural science will give it the pecuniary aid needed to carry it through the financial crisis. Subscribe for it, and ask your friends to take it. It is published by the Peabody Academy of Science, Salem, Mass., at $4.00 a year.

THE NORTH AMERICAN REVIEW for January sustains its high character both as an organ of public opinion on the great questions of the day and as a critical reviewer of literary works. Its table of contents includes "The Constitution of Great Britain and the United States", "Arctic Exploration", "Antiquity of the North American Indians", "The Currency and Finances of the United States" (a very able and valuable article), "Dr. Clarke's 'Sex in Education'" (an excellent article), "La Marmora's Revelations on the War of 1866", and a large number of "Critical Notices", of current publications. The *North American Review* is still published by James R. Osgood & Co., Boston, which is a guaranty that it will keep abreast of the intellectual movements of the present age.

THE NATIONAL SUNDAY-SCHOOL TEACHER entered on its ninth volume with the January number, which is full of information of interest and value to all engaged in the Sabbath-school work. The *Teacher* is entitled to the credit of introducing the system of lessons on related topics, now so generally adopted, and its influence has been wide and salutary. It has no equal among Sabbath-school periodicals. Its "Lessons" for 1874 will be the "International Series", selected by a committee of the National Sunday-School Convention, and the best methods of teaching will receive continued attention. It is published by the Adams, Blackmer & Lyon Publishing Co., Chicago, Ill. Subscription price, $1.50 a year.

THE NURSERY (John L. Shorey, Boston,) is the gem of the periodicals designed for the little ones. Its appearance each month never fails to make their eyes sparkle with delight. We do not see how it could be improved, either in matter or illustrations. It has the key to little children's hearts.

——WE will furnish THE NATIONAL TEACHER for 1874 and *Littell's Living Age* for $8.00; the TEACHER and *Lippincott's Magazine* for $4.00; the TEACHER and the *College Courant* for $3.50; the TEACHER and Northrop's "Education Abroad" for $2.50.

NEW BOOKS RECEIVED.

THE SOURCES OF STANDARD ENGLISH. By T. L. Kington Oliphant, M.A., of Balliol College, Oxford. London: Macmillian & Co. 1873. For sale by Robert Clarke & Co., Cincinnati. Retail price, $2.00.

HOW TO TEACH. A Manual of Methods for a Graded Course of Instruction. For the Use of Teachers, By Henry Kiddle, A.M., Thomas F. Harrison, and N. A. Calkins. New York: J. W. Schermerhorn & Co. 1874. Price, $1.25.

A SCHOOL MANUAL OF ENGLISH ETYMOLOGY, and a Text-book of Derivations, Prefixes, and Suffixes. With Numerous Exercises for the Use of Schools. By Epes Sargent. Philadelphia: J. H. Butler & Co.

FREEMAN'S HISTORICAL COURSE. History of Scotland. By Margaret Macarthur. Edited by Edward A. Freeman, D.C.L., New York: Henry Holt & Co. 1874. Price, $1.00.

CROSBY'S LEXICON TO XENOPHON'S ANABASIS; Adapted to all the Common Editions. By Alpheus Crosby. New York and Chicago: Woolworth, Ainsworth & Co. Price, $1.00.

THE ELOCUTIONIST'S ANNUAL. No. 2. Comprising New and Popular Readings, Recitations, Declamations, Dialogues, Tableaux, etc. Edited by J. W. Shoemaker, A.M. Philadelphia: J. W. Daughaday & Co. 1874. Price, 35 cts.

PHILLIP PHILLIPS' INTERNATIONAL SINGING MANUAL FOR SABBATH SCHOOLS. 1874. New York and Chicago: A. S. Barnes & Co. Price, 25 cts.

SCHOOL REPORTS.

Virginia. Third Annual Report. 1873. W. H. Ruffner, State Supt.
South Carolina. Fifth Annual Report. J. K. Jillson, State Supt.
Iowa. Biennial Report. 1873. Alonzo Abernethy, State Supt.
Kansas. Thirteenth Annual Report. 1873. H. D. McCarty, State Supt.
Fort Wayne, Ind. Tenth Annual Report. 1872-73. J. H. Smart, Supt.
Chillicothe, O. Seventeenth Annual Report. 1872-73.
South Charleston, O. Rules and Regulations, David W. DeLay, Supt.
Elkhart, Ind. 1872-73. J. K. Watts, Supt.
Atlanta, Ga. Second Report. 1872-73. B. Mallon, Supt.
Rochester, N. Y. 1872-73. S. A. Ellis, Supt.
Nebraska State Normal School. 1873. T. J. Morgan, Principal.
Hamilton, O. 1872-73. Alston Ellis, Supt.
Wooster, O. 1872-73. J. M. Clemens, Supt.
Zanesville, O. 1872-73. A. T. Wiles, Supt.
Lancaster, O. 1872-73. G. W. Welsh, Supt.
Oberlin, O. 1872-73. Edwin F. Moulton, Supt.
Steubenville, O. 1872-73. M. R. Andrews, Supt.

THE

NATIONAL TEACHER:

A MONTHLY EDUCATIONAL JOURNAL.

Vol. IV. MARCH, 1874. No. 3.

THE STATE AND THE HIGHER EDUCATION.

The remarkable demonstration of Pres. Eliot, of Harvard University, against the support of the higher education by state aid, seems to have awakened a new discussion all over the country. The out-and-out friends of the American common-school system are surprised to learn how widely the views of this able and zealous champion of the university are shared in cultivated circles, in all the states. We are again reminded of the old fact that the aristocratic principle is inherent in human nature, and can not be laid by any conjuration with a paper constitution. Driven from its favorite lurking place in a hereditary social cast, sustained by the law of primogeniture, which monopolizes political power and allies itself with a state ecclesiasticism, this principle, in America, seems to concentrate on the two poles of money and cultivation.

The popular aristocracy is the class of successful money makers, and, spite of a good deal of crudeness in culture and manners, is not the worst yet seen in the world; indeed, it represents, in a good degree, the practical ability and energy of the country. But, in every state and city, we find a group of people, more or less cultivated, who aspire to an aristocracy of brains. Our numerous private and sectarian colleges are centres of this development. And one of the characteristics of this incipient learned class, just now, seems to be a real or affected contempt for popular culture. Sometimes it takes the form of a wholesale disparagement of the value of our common

school training as a mental discipline. We also hear the familiar old complaint of "young people being lifted above their position in life by over-education." But the most common line of attack on the system is at the point where the state comes in to help the citizen in the higher forms of popular culture; and Pres. Eliot represents a considerable body of the literati and more exclusive professional people of the country in his protest against this idea of taxation of the people for anything above the common elements of a primary and grammar-school education.

It may be well to run over some of the more evident arguments that still persuade our people to support high and normal, even collegiate and professional schools in some instances, by state aid.

One of the most forcible reasons for the support of the higher education by the state, is the *absolute necessity of a professional class of trained teachers of common schools.*. As far as our American common-school system is concerned, the teaching has been as good as could be expected in a country so new, just organizing its educational facilities. Thirty years ago, teaching was the occasional employment of almost every intelligent young person in the eastern and middle states. The West did not then attract our promising young men so powerfully as to-day; and a good proportion of the teachers, even in country schools, were young college students or graduates. The great war swept the public schoolroom clean of its able-bodied masculine teachers; and when the war closed the new age was upon us, and young American manhood did not return to its quiet old ways. Whether we like it or not, the teaching of children below the age of 12 in public schools is now done by young women, at best, "superintended"—not always to their advantage—by one man set over a schoolhouse full of teachers in the cities; in the country, under the intermittent oversight of a school committee. Meanwhile, we have been pushing on our appropriations for popular education, till the state of Massachusetts paid, last year, $20 for the schooling of each child in the state.

Just here the whole system has come to a dead-lock. The exigencies of to-day demand a style of work in the common school for which the vast majority of these girls are utterly incompetent. The money expended in the northern and western states upon teachers should obtain a far higher grade of

ability than now. The key-note of reform to-day all over the land, in popular education, is *skilled labor in the schoolroom.* A great effort must be made to educate a body of young women who shall be competent to handle this vast public interest. The excitement of industrial life will, for years to come, sweep the mass of our children out of the schools as early as 12 years of age. How can we use these six precious years of common-school training to the best advantage for the state?

Just here the state takes the field, and offers, in the free high schools of the country, supplemented by occasional normal and training schools and a few state colleges, the sole practicable method of producing this body of trained teachers. The academical and sectarian collegiate system of schools has hitherto, to a considerable extent, supplied this want, and still must be relied upon, to a degree. But it is more and more becoming apparent that this method of supply is altogether inadequate. The majority of young women who desire to become common-school teachers can not afford the expense of a thorough academical education; and multitudes of our young men are practically shut out from such higher educational opportunities. The class thus circumscribed in means is equally valuable with that which can avail itself of such private opportunities; indeed, on the whole, our most valuable teachers of children are young women who must depend upon the state for their outfit.

To say to this class of young women that they must rely on private charity to fit themselves for public service, is to add humiliation to injury. No youth feels like a pauper while attending a free high or normal school; but few can receive private aid, or study upon collegiate funds without such a feeling. We believe one of the most powerful causes of the servility of the cultivated classes abroad has been their frequent dependence on the private bounty of the rich and powerful for their early education. We need in the schoolrooms of America a class of young men and women who are free from all complication with, and undue leaning upon, a superior class, religious sect or beneficent Alma Mater. Such a class can only be developed in the free high and normal schools, where a superior education is offered freely to every youth who aspires to enter upon the honorable calling of teacher. The abolition of this type of schools would be followed by an increased demand for the compensation of teachers to meet the expenses of academical education far in excess of the amount now consumed by

this portion of our public-school system. The only decent excuse the state can urge for the meagre wages now paid to women school teachers, is the consideration that it has supplied the training necessary to fit them for their position. There is not money enough in America to pay for educating our 200,000 school teachers in first-class academies and private colleges up to the demand of the times for scholastic ability.

The state constantly acts upon the principle that it has the power to construct the instrumentalities for operating any great national interest. In the city where I live, the government supports a great military arsenal to furnish arms and ammunition for its soldiers. It establishes navy yards and builds ships; in a thousand ways acts on the principle that it has the right to manufacture the implements of a great public service. Now, the preparation of common-school teachers is one of those delicate and critical kinds of work that can not safely be entrusted to "private enterprise." If the state undertakes to tax the people for education, it is bound to use the money to the best advantage, and make its six years' instruction tell upon the national intelligence. To do this it must, at least, initiate and set the example of the style it demands in the teacher. To demand the education of 6,000,000 children in the United States in common schools, to tax the people for this work the sum of $60,000,000, and then to leave the supply of teachers, the very soul of the whole enterprise, to private caprice, is one of those practical absurdities that always flow from a political ultraism which would give every obstinate man or community the right to block the wheels of the national life. If for no other reason than to supply fit teachers for children in the lower grades of schools, the state should support high and normal seminaries, open to all who come. The people see this, and will not consent to place the preparation of this most important body of officials in the hands of an educated clique, representing the obsolete social and educational fancies of an age gone by.

Again, on the lowest ground of pecuniary advantage, the state is immensely the gainer by its efforts to offer the higher education freely to superior youth. This complaint about "educating young people above their position in life", has a more slender foundation than any species of public fault-finding. Now and then a youth is pushed out beyond his capacity in these schools, and after a fruitless buffeting among the break-

ers, subsides into his natural position in shallow water. But, even to this class, the free high school is a great public benefit, being the best available test of real ability in such incompetents. The curse of American life has not come from the few young persons "educated beyond their sphere" in public schools, but from the myriad of ignoramuses who have pushed into all places of trust and responsibility in professional and public life. A thorough system of high-school training adopted fifty years ago, would have saved the West millions of dollars and thousands of lives in exposing multitudes of pretentious young men who have forced themselves into positions where the public has been called upon to "pay the damage." The best protection of our public against imposition of this sort, is a thorough system of free high schools, which, by a principle of "natural selection", will secure "survival of the fittest" among aspiring youth.

Besides, where one boy or girl has been injured by "over-education" in these schools, a hundred have been sent forth with an education and ability that has been a positive addition to the power of the state. Passing by all the ordinary phases of such advantage in furnishing superior industrial skill and ability for public service, we may refer to one most vital result. Every clever young school mistress, well educated in a free high or training school, becomes a new centre of civilization to the country. The first thing done by such a girl is, ordinarily, to lift up her own family to a better position in life. How many of these devoted girls have educated the younger children of the flock, and gradually lifted the household from a family of drudges to an independent, self-sustaining household, sending forth more than one valuable member of society. *The permanent elevation of a family in the social scale, by legitimate means, is one of the most valuable services rendered to the state*, whatever may be thought of it by the snobbery in the saloons or the universities, that sneers at public education. Many a great statesman might be happy, if he could be sure he had conferred as much permanent good on the state as thousands of school mistresses in thus adding a superior family to the commonwealth. Every boy or girl we send out of a free high, normal, or collegiate school, well educated, pays the state such an interest on the investment as the wildest dealer in Chicago corner-lots can never hope to obtain.

But this whole objection to higher education by the state,

fails in a most vital point. It practically asserts that the state has a right to build up its own citizenship only in its crudest and most primitive regions of development, and should have no care to produce the finer elements of success. *Public education must aim at quality as well as quantity in citizenship.* Not only should it endeavor to give to every child the measure of intelligence necessary to keep it from becoming a public burden, and enable it to cast a vote understandingly; but it should seek out and encourage the superior talent among its children. One skilled mechanic; one extraordinary teacher; one accomplished man of affairs; one highly gifted and cultivated woman, thus developed, may become the centre of a public and social influence that no man can estimate, even in ordinary times; and in critical periods may be, under God, the salvation of a community. It does seem a little queer to hear men who pride themselves upon "superior culture", denounce the state for a natural desire to improve the quality of its material for citizenship.

One of the most effective uses of private beneficence in education is the reinforcement of public funds in these higher schools. The state must keep the lower grades of schools at their best; and often the public ability fails to make the high school a fit complement to the system. No better thing can be done by any rich man than to furnish a town or city with a portion of the means necessary to place its higher education on a firm basis. Our state and city normal schools are now half starved by their meagre appropriations, and unable to do their best from lack of means. A generous private endowment for special uses to such a school, like that given to the Agricultural College in New York, would be a great help. Here is a field where private enterprise may coöperate with public taxation, without the rivalry and jealousy that so often disturbs our whole educational work. The people may well be on their guard against the schemes of impracticable cliques of cultivated men, who, in a short-sighted contempt for popular culture, or an over-strained zeal for personal liberty, would remand American civilization to the shadows of an European medieval order of society.

Springfield, Mass. A. D. MAYO.

ARISTOTLE AND EDUCATION.

(*Concluded.*)

Aristotle, in Greek fashion, lays much stress upon the literal *breeding* of children, the advantages of good stock, fortunate birth, and careful nurture. He specifies that infants ought to be fed with abundance of milk, without wine, allowed a free motion of the limbs, and inured, very early, to the effects of cold. Nothing should be taught the child, not even necessary labor, before he is five years old, lest it should prevent his growth. He must exercise freely, however, and his plays may be imitations of what he is afterwards to do as serious work. The conflicts of boys are not to be forbidden, since the "struggles of the heart, and the compression of the spirits" which they produce, develop strength in a peculiar manner.

The mental training of children requires the utmost watchfulness and circumspection on the part of nurses, parents, and teachers. Aristotle declares that "it does not make a slight, but an important, nay, rather, the whole difference", whether children are brought up in right habits or not, from the beginning. First influences are most important, because "what we meet with first pleases best." The fables and tales told in the nursery should be of a proper sort. Children should be kept from the company of slaves, and all vulgar or vicious persons. They must hear no indecent language, see no obscene pictures or statues, or be tempted, in any way, to violate good morals or imitate bad manners. They should be guarded and tended within the pale of the family until they arrive at the age of seven. At that age the first period of regular school education should begin, to continue for seven years. Another and higher course of education, also of seven years duration, should complement the training of boyhood, and complete the citizen for the highest duties of life, both private and public.

The eighth book of Aristotle's *Politics*, evidently a fragment, treats of the studies suitable to the period of boyhood, and embraces many critical remarks on prevailing usage among the Greeks. Lacedæmon is specially commended as being the only city in which education receives proper attention from the state.

Four branches are named, in the *Politics*, as comprising the matter which it was customary to teach children. These are

reading, gymnastics, music, and painting. The utility of reading is taken for granted, not only for its own sake, but also as a means of acquiring other sorts of learning. The gymnastic exercises of boys, Aristotle thought, should be very gentle, as violent exercise is brutalizing, and, also, incompatible with study. "It is impossible", says our philosopher, "for the mind and body both to labor at the same time; as each labor is productive of contrary evils: the labor of the body preventing the progress of the mind, and the mind of the body." Painting is recommended as of great and varied usefulness; for instance, to prevent mistakes in buying pictures or vases. It should be learned, moreover, not merely for its utility, but because it enables one to judge of the beauty of the human form. Some things are to be learned simply because they are noble and liberal; for "to be always hunting after the profitable, ill agrees with great and freeborn souls." The subject of music is discussed at considerable length, and the conclusion reached is, that children should be taught to sing and play music of a moral and elevating character, principally as a means of relaxation and amusement. This course of study seems meager, and it is probable that Aristotle included much more under the term *reading* than we do.

After the youth shall have arrived at the age of fourteen, three years may be specially devoted to severe gymnastic exercises. This will leave four more years for the completion of education. Aristotle gives no outline of the course to be pursued during these four years, but it is safe to infer that he would have the young men instructed as he himself taught them at the Lyceum. Indeed, the school of Aristotle may be regarded as a sort of primitive university conducted by a single professor. It was the Harvard of Athens, where the Stagirite read a continuous series of lectures to any and all who were seeking higher education. These lectures were upon rhetoric, logic, metaphysics, ethics, politics, economics, mathematics, physics, and natural history.

Aristotle must have exercised a powerful influence upon his contemporaries, and especially his pupils. He was the first really scientific teacher of whom we have any account. His learning was vast. Quintilian refers to him as a prodigy of erudition. He gave form and method to studies before shapeless and confused. He was a great naturalist. Centuries elapsed without adding anything to the facts he left in natural

history; and Agassiz says that we must come down to Linnæus before we find systematic zoölogy taken up where Aristotle had left it. His system of logic, according to Grote, "was not only of extraordinary value in reference to the processes and controversies of his time, but, also, having become insensibly worked into the minds of instructed men, has contributed much to form what is correct in the habits of modern thinking." Burke declares that, of all Aristotles writings, only the treatise on natural philosophy is unworthy of him, thus giving indirect testimony of the sustained and varied power of the great philosopher. Another distinguished voucher for Aristotle's worth, and that to the modern student, is the late Doctor Arnold, who stated that he found the *Politics* of great and direct use to him every day of his life, and who further said that he would not consent to send his son to a university where he would lose the study of "dear old Tottle."

A just estimation of Aristotle's system of education can not be made unless we consider to what classes the system is intended to apply. In the ideal state, depicted in the Politics, the citizens are to be as nearly equal as possible, and they are all to be educated. The citizens are to be served by slaves. Slavery is recognized as the natural condition of a portion of mankind. From the hour of their birth some are marked out as slaves. This Aristotle emphasizes by frequent repetition. The slave is fated to an abject life. His position is but a step above that of the lower animals. He knows that there is such a faculty as reason, but he is incapable of using it. He has no deliberative faculty. He has a natural need of a master, and his condition of servitude is right and just. The instruction which he is to receive is, of course, that of a menial, and very limited.

And how about women? Are they to be educated? Aristotle's views are briefly these: The female of animals is, as a rule, inferior to the male. Woman is inferior to man, and in some respects opposite. She is weaker than man in body, and in intellect. Man should exert a political government over his wife. His duties in the family are different from hers. It is his business to rule, hers to obey; his to acquire subsistence, hers to take care of it; his to deal with the outside world, hers to order the household within. As to children, it is no more the mother's duty to rear them than the father's to educate them. That women should be educated, especially for the du-

ties of the marriage relation, Aristotle distinctly affirms; but he nowhere describes the manner or place of their training. We may fairly conclude that he would confine their education to instruction in the domestic virtues, according to the dictation of the "man of the house."

Cincinnati, O. W. H. VENABLE.

THE ENGLISH, THE LANGUAGE FOR SCIENCE.

Scientific men, especially naturalists, are being more and more directed to the necessity of finding a common language in which their writing can best be published. In the dawn of the modern scientific era, the Latin was exclusively used, because all scholars were supposed to be more or less familiar with it. This was especially true in Catholic countries, because the Romish church had retained this language in its ritual and its priests were generally able to use it fluently. But in later centuries the living languages of Europe have been brought to a better and purer condition, and are now used for the higher purposes of literature, and the Latin is little used except for special and peculiar purposes. It is still largely retained in natural history for the descriptions, which are expressed in condensed and technical words chosen from it. But with the limited descriptions of genera and species, etc., in Latin, the body of each work is now given generally in the mother tongue of the author. The French naturalist writes in French, the Italian in Italian, the German in German, etc. There has, doubtless, hitherto been more honor given to the French, this for a long time being regarded as the court language of Europe. Scientific men have not seldom written their works in French although not their native tongues, but this custom is falling into disuse. The difficulty now is, that the languages are so numerous that few naturalists have the time to master them all, and hence much of the knowledge he may need, he must lose, in many cases, greatly to his injury.

This subject has recently been discussed by two of the leading naturalists of Europe, M. A. de Candolle, the very eminent French botanist, and Professor Thorell, a Swedish naturalist of the University of Upsala. M. de Candolle thus writes:

"We have therefore entered upon a period of confusion. What is thought to be new in one country is not so to those who read books in

other languages. It is vain to study living languages more and more; you are always behind-hand in the complete knowledge of what is published in other countries. Few persons are acquainted with more than two languages; and if we try to pass beyond a certain limit in this respect we rob ourselves of time for other things; for there is a point at which the study of the means of knowledge hinders our learning. * * * In the present century civilization has much extended north of France and population has increased there more than to the south. The use of the English tongue has been doubled by its extension into America. The sciences are more and more cultivated in Germany, in England, in the Scandinavian countries, and in Russia. The scientific centre of gravity has advanced from the south toward the north. Under the influence of these new conditions, a language can only become predominant by presenting two characters: 1st. It must possess sufficient German and Latin words or forms to be within reach of the Germans and of the people who make use of Latin tongues; 2d. It must be spoken by a considerable majority of civilized people. In addition to these two essential conditions, it would be well for the definitive success of a language that it should possess the qualities of grammatical simplicity, of conciseness and clearness. English is the only language which may in fifty or a hundred years offer all these conditions united. The language is half German and half Latin. It possesses German words, German forms, and also French words and a French method of constructing sentences."

In order to show the future extension of the Anglo-American tongue, the following figures are given:

"English speaking peoples—in England, 31 millions; in the United States, 40; in Canada, etc., 4; in Australia and New Zealand, 2: total, 77."

Of the English speaking people in India, etc., no figures are given.

"German speaking peoples—in Germany and part of Austria, 60; in Switzerland (German cantons), 2: total, 62.

"French speaking peoples—in France, 36½; in Belgium (French portion), 2½; in Switzerland (French cantons), ½; in Algeria and the Colonies, 1: total, 40½."

In order to show the numerical advantage of the English language in the future, M. de Candolle takes the rate of growth of population for each nation during the present century, and estimates as follows:

"England doubling in 50 years would in 1970 have 124 millions; United States, Canada, and Australia doubling once in 25 years would in a century have 736 millions—making a total of the English speaking race in 1970 of 860 millions.

"In Germany the northern population doubles in 56 to 60 years, that of the south in 167 years. Let us suppose 100 years for the average, giving in 1970 about 124 millions.

"In French speaking countries the population doubles once in about 140 years. In 1970 it will amount to about 69½ millions. * * * The individuals speaking German will (in 1970) form a seventh part, and those speaking French a twelfth or thirteenth part of those of English tongue, and both together will not form a *quarter* of the individuals speaking English."

While these predictions of M. de Candolle may not be entirely verified in all respects, yet it is no doubt true that the nations using the English language are in the future to gain a vast ascendency in numbers over the Germans or French. They have not only vast energy and vitality, but they have planted themselves in lands of such extent and resources as to give them every advantage. The Americans in the United States and the British Americans as well, as also the English in Australia and New Zealand, have a perfectly free field before them, the Indian tribes being no obstacle to themselves or the extension of the English language. Not so with the French and Germans. They have few colonies, and they can hardly hope to extend the use of their languages on the continent except through the slow increase of population.

The next question is, Whether the English language is in itself worthy of such vast extension, and whether it is fit to become the chief language in which the science of the world should be published?

It is certainly a language easily learned in all respects except its pronunciation, and very large numbers on the continent of Europe are now able to read and write it with ease. It is there every day becoming more essential as a part of a good education. Your older readers will remember the wonderful speeches made by the Hungarian Kossuth in the English language in this country in 1851. This knowledge of English he had very rapidly acquired. This country has been honored by the residence in it of three distinguished foreigners, all from Switzerland and all friends,—Agassiz, Guyot, and Lesquereux (alas! the first is not now living)—all distinguished for science. They had no difficulty in mastering our language.

The language is direct and concise, and, at the same time, flexible, and for these reasons has great advantages. M. de Candolle says:

"I have observed families where the two languages known in the same degree were English and French. In this case the English maintained supremacy even in a French-speaking land."

"The general rule is this: In the conflict of two languages, every thing else being equal, it is the most concise and the most simple that conquers. French beats Italian and German; English beats the other languages. In short, it need only be said that the more simple a language is, the more easy it is to be learnt, and the more quickly it may be made available for profitable employment."

If our language is thus fitted to prevail and to become the language in which the science of the world will hereafter be published, it is of the highest importance that it should be taught by all our teachers in its purity. There is danger that we may in our American time-saving directness and conciseness injure our grand old mother-tongue. Our public schools have done much to secure uniformity and a good degree of accuracy in our language, The press and an educated ministry can also do much in this cause. Our literature is every year becoming more full and valuable, and probably no people of the world reads so much or pays out so much money, *per capita*, for newspapers and books. Scientific and semi-scientific books are largely purchased. It is because the number of readers is so large that foreigners are beginning to publish their works in the English language, and it is gratifying to know that naturalists and other scientific men are looking to our language as the most desirable to be used if they would gain the widest access to the world of to-day and the largest audience in coming ages.

No quotations have been made from Professor Thorell, the Swedish naturalist, who not only urges the use of English as the language of science, but has himself first published his own scientific works in it. In this respect he differs from Professor de Candolle, whose theory is as yet better than his practice. Other Swedes and Russians have published their scientific works in the English language, as not only preferable to their own but to the French and German.

E. B. ANDREWS.

—— THERE is an inborn antagonism between the intellectual and the sensual nature of man. If you give to the intellect no development, you leave the senses as the ruling power. The man is a sensualist simply because he knows no higher pleasures. Among a population grossly ignorant, sensualism prevails in its most appalling forms.—*Prof.* HART.

VOLUNTARY ATTENDANCE.*

In the discussion of this subject, it is taken for granted that attendance is a good thing—good for the student.

Whether the occasion be for recitation, or lecture, or study, or exercise, or sleep, or for religious service, the propriety of the thing done is not now in question; it is assumed that authorities expect and invite attendance only where it ought to be given.

Voluntary attendance is better than compulsory. The will can be and ought to be educated, and, like every other faculty, the best method of developing its strength is by exercise. Freedom ennobles, compulsion degrades; therefore, attendance should be voluntary.

However, observation has taught some of us that a noble youth, endowed with free will, may choose to attend—he may choose to be absent. In fact, the voluntary element may defeat the original good, so that there is voluntary non-attendance. By adhering to the mode, the substance is lost. The proposition, attendance should be voluntary, must then be understood with the addition that absence should not be voluntary.

This is enough to show that theory is not all that is wanted. The question is a problem, and may be stated: how to secure attendance and yet make it voluntary. Here we notice that, except in the extreme case of a child bodily carried to school, there is more or less of the voluntary element in all attendance. Where the penalty for truancy is a flogging, the exercise of the pupil's will is at a minimum; there is more freedom as the penalty is lighter, or as the reward for attendance is diminished. Practically attendance may be called quite voluntary where the only motives used are the sense of duty, desire to gain knowledge, and the approval of the teacher. Since then freedom and compulsion are capable of so many gradations, the problem may be stated: how to secure attendance with the least amount of compulsion.

In nearly all sciences a good statement of a question is half of the solution. It is so in this case.

The compulsion which may properly be used depends upon,

1st. The age of the pupil, growing less as the age increases;

* A paper read before the Ohio College Association, Dec. 30th, 1873, by Pres. E. T. Tappan, of Kenyon College.

2d. The character of the school, being greatest in a private, home school, and least in a professional school; and 3d. Upon the individual character of each pupil.

In primary schools for children, these should be all the compulsion that is necessary, combined with a system of rewards, to secure punctual and regular attendance. The habit of attendance may be easily formed at an early age. If this were done generally, the question of voluntary attendance in our colleges would present much less difficulty. In the law, medical, and other professional schools, the students are supposed to be beyond the age of tutelage; their habits are already formed; they are about to engage in the earnest work of life; they appreciate the advantages of regular attendance; or, if they do not, it is their own affair. If in such schools degrees are conferred only upon passing rigorous examinations, then the attendance may be voluntary. It may be the same in some universities, where the students are of mature age, and are pursuing special courses of study, similar to professional studies, and with the same conditions as to rigorous examinations.

In colleges and universities, where students are pursuing studies for universal culture, as is the case in all the colleges of Ohio, the students are not generally at mature age at entrance, and ought not then to be left to the government of their own wills. When they leave these schools, however, they have usually arrived at maturity, and are placed in situations where they have entire control of their own conduct. It is proper, therefore, that their government should look to this end, and they should be more and more at liberty, so that when they leave college, they may be ready to quit themselves like men.

Besides public and private advice, the means which may be used properly, to compel attendance of college students are much more restricted than in schools for younger persons. The following are suggested:

1. Keep a record of absence and tardiness, specifying that which is with sufficient excuse.

2. Unless circumstances make it impossible, excuse for absence should be obtained in advance.

3. After unexcused absences, give a written admonition to the student.

4. After more unexcused absences, give a second written admonition to the student, and send a special report of the case to the parents.

5. After more unexcused absences, the delinquent should be suspended or dismissed as unfit for a college education.

6. At the end of every term send a detailed report of all a student's absences, excused and unexcused, to his parents, guardian, or next friend.

7. In these term reports call attention to the irregularity of every student who has had an admonition during the term.

8. In the college records, a student's standing should be somewhat dependent upon his punctuality and regularity.

This last item is, in my judgment, strictly just. The college standing ought not to depend upon scholarship alone. I am not willing to ignore any moral element that can be estimated. No wise man does so in common affairs, and teachers ought to be the last to act as if intellectual achievements were all that makes a man worthy of honor.

In my own experience, nothing has had better effect than frequent appeals to home influence. A few earnest words to a father have resulted in wonderful reforms. Four years ago, the average of unexcused absences in Kenyon was about one in two weeks to each student; during this year (1873) it has been about one in five weeks to each student; and the change seems to have been accomplished by persistent attention to individual cases.

DO HENS SET?

If the question at the head of this article is to be answered by a reference to the dictionaries, the answer will be "*no.*" The dictionaries give *incubate* as a meaning of *sit* but not of *set.*

Let us fortify this decision by some quotations.

"*Set* is often used for *sit;* as, '*Set* down for a moment.' The sun sets, but a human being *sits.* A hen is generally said to *set*, but she does not —she *sits.*"—*Vulgarisms and Other Errors of Speech*, p. 99.

"Most of us have heard and laughed at the story of the judge who, when counsel spoke of the setting of the court, took him up with, "No, brother, the court sits; hens set.' But I fear that some of us have laughed in the wrong place. Hens do not *set;* they sit, as the court does, and frequently to better purpose. No phrase is more common than 'a setting hen', and none more incorrect. A hen sits to hatch her eggs, and, therefore, is a sitting hen. *Sit* is an active, but an intransitive verb—for it means to put one's self in a position of rest. *Set* is an active, transitive

verb—very active and very transitive—for it means to cause another person or thing to sit, willy-nilly. A schoolma'am will illustrate the intransitive verb by sitting down quietly, and then the transitive by giving a pupil a setting down which is anything but quiet. This setting-down is metaphorical, and is borrowed from the real, physical setting-down which children sometimes have, much to their astonishment."—*R. Grant White's Words and Their Uses*, p. 156.

The anecdote that Richard Grant White evidently alludes to, is the following: Curran once said in court "an action lays." The judge said, "*lies*, Mr. Curran, *hens lay*." Curran afterward, when the judge said to a counsellor, "set down", retorted by saying, "*sit* down, your honor, *hens set*."

More than twenty years ago, I wrote an article on *sit* and *set*, in which I attempted a defence of the expression, "hens set." I see no reason now to change the views then expressed. Why is it incorrect to say, "hens set"? If the expression is incorrect, it is because it is contrary to usage. Horace, in his letter to the Pisos on the poetic art, said:

> "Multa renascentur, quæ jam cecidere, cadentque
> Quæ nunc sunt in honore, vocabula, si volet usus,
> Quem penes arbitrium est et jus et norma loquendi."

The English of this is:

Many words will be revived, which have already fallen out of use, and will fall out of use which are now in repute, if usage shall will, with which is the decision, and the right, and the standard of speaking.

This is no less true now than it was when uttered nearly two thousand years ago. It is necessary, however, to specify what is meant by *usage*. The whole subject was ably discussed in a chapter entitled "The Nature and Characters of the use which gives Law to Language", in Dr. Campbell's Philosophy of Rhetoric, first published in 1766. He says the use must be reputable, national, and present, and he devotes a dozen pages to the discussion of these three kinds of use.

It is safe to declare that usage in language is competent to justify the use of any word in any sense or in any form. Lowth did not feel the force of this fact when, in speaking of a certain expression, he said that "No authority is sufficient to justify so manifest a solecism." To this quotation Campbell (p. 179) adds:

"No man needed less to be informed that authority is everything in language, and that it is the want of it alone that constitutes both the barbarism and the solecism."

The utterances of Richard Grant White, and of S. S. Gould in his Good English, show that they have not clear perceptions as to what is the correct standard of speech. Some of these utterances resemble very much that quoted by Campbell from Lowth. They do not seem to observe that the neologism, as well as the archaism of to-day, may become a correct mode of speech in the future, and that an accepted current mode of speech may, in the future, become archaic. When *loveth* was the accepted form of this word for general use, *loves* was a neologism, yes a solecism. *Loves* is no longer a solecism, and *loveth* is archaic, except in what is called the solemn style and in the language of poetry.

For some interesting remarks upon the growth and changes of language, the reader is referred to the preface of Lithe's great French dictionary, Paris, 1873. These references to the power of usage have been given as preliminary to the plea I have to make in favor of the acceptance into standard English writing of the word *set* in the sense of *incubate.*

Etymologically, *sit* and *set* (compare *lie* and *lay*, *rise* and *raise*, *fall* and *fell*, *drink* and *drench*) are traceable to one primitive root *sad* (Sanskrit). I venture to say that *set* is an older word than *sit*, because in the process of phonetic change *sad* would become *sed* before it would become *sid*. The root of the Greek word for sit is *hez* or *hed*, *h* representing the Greek aspirate or rough breathing, and the root of the Latin word is *sed*. It should be observed that it is a phonetic law that *s* and *h* are interchangeable. In process of time a new word *sit* was formed from *set* by a vowel change. It then became necessary to select certain of the meanings of *set* and give them to the new word *sit*. Notwithstanding the word *sit* was formed an unknown number of centuries ago, it may be safe to say that some persons have not yet admitted it into their vocabulary. It is evident that the dictionary division of the meanings of the more primitive *set* between *set* and *sit* has not been followed in colloquial usage, even respectable colloquial usage. Richard Grant White's division, on the basis of the transitiveness of *set* and the intransitiveness of *sit*, would make it incorrect to say, "The sun sets." This expression has the authority of high and low, rich and poor, learned and unlearned, both in spoken and written language.

I suggest another distinction between *set* and *sit*, which tallies exactly with respectable colloquial usage. This usage makes

sit a pure neuter verb (that is, one that expresses a state of being) and *set* an active verb, sometimes transitive and sometimes intransitive, He *sits* on the chair; he *sets* the pitcher on the table; he *sits* by the window and looks at the sun *set;* he *sets* out on his journey; he *sets* down; the hen *sets*. It is plain that *sets* is active but intransitive in "the sun *sets*", and that in "he *sets* down", *sets* is active and may even be considered as transitive, governing *himself* understood. The word *sets*, in the expression "the hen *sets*" connotes (a term borrowed from the logicians) vastly more than the word sits in the expression "the hen *sits*." A hen often *sits* when she does not *set*. When a hen *sets*, she not only *sits* on the eggs to keep them of the proper temperature (said to be 104° Fahrenheit), but she at times turns the eggs over and even carefully changes their positions in order, no doubt, to give all a fair chance of being hatched. (See Library of Natural History, p. 591.)

I grant that the general usage among authors is in favor of "hens *sit*", and "*sit* down", but I claim that colloquial usage generally favors "hens *set*" and "*set* down"—the latter not being in as general usage as the former. What can be done to bring about a uniformity? It will be easier to bring writers to adopt the colloquial usage than to change colloquial usage to that of the books, in view of the fact that there are strong reasons in favor of the colloquial usage. Dr. Campbell, in his Philosophy of Rhetoric, has a chapter on "The Nature and Use of Verbal Criticism, with its principal Canons", in which is a section entitled "everything favoured by good use is not on that account worthy to be retained." Is not "hens *sit*" an example?

Salem, Ohio. W. D. HENKLE.

—— LANGUAGE is an art; in its lower and rudimentary forms a useful art, in its higher and more cultivated forms a fine art; and of all the fine arts it is incomparably the noblest and the most refining. It is as a means of æsthetic culture, of refining the sensibilities, of evolving the latent harmonies of the soul, of filling the imagination with images of ideal beauty, that we would especially urge its retention in our systems of education. We talk of the dead languages; but language does not die. The Greek and Latin classics are a key to the history, the thinking, the literature, and the social and moral progress of the race.—*Prof.* A. C. KENDRICK.

CORRESPONDENCE AND QUERIES.

MR. EDITOR: Professor Henkle, speaking of isinglass says that it "is generally derived from the German *hausenblase.* * * * The corrupt pronunciation of *hausenblase* is very similar to the pronunciation of the word *isinglass*, which orthography originated in a mistaken reference to the word glass. Webster's reference of the word to *iceglass* is wrong, because an afterthought is not an etymology. This afterthought gives no reasonable account of the first two syllables *isin.*" Mr. Henkle's derivation is ingenious, but it assumes two things: first, that *hausen* is corrupted into *hy-sen* by the Germans, and still further by the English into *isin;* and, secondly, that the two syllables, thus doubly corrupted, by mistake are referred to the word *glass*, instead of the word *blase.*

Upon careful consideration it may seem, that Mr. Webster's *afterthought* has the merit of being reasonable. Isinglass appears to be a compound word (Webster so regards it), made up of the two terms, *ice* and *glass*, both sturdy Anglo-Saxon words, and appearing in the German as *eis* and *glas*, and both primitive. In early times, the orthography of ice was *is;* the terminations *an, en* were of frequent occurrence in the Anglo-Saxon; *en* for euphony sometimes converted into *in.* Now to the stem *is* add the termination *in*, and for the two first syllables we have a reasonable account. The etymology of icicle supports this view. In that word, the syllable *ice* is contracted into *i*, and the two syllables *cicle* are derived from *kegel*, a cone. The orthography of icicle was formerly *isicle.*

Waverly, O, JOHN T. MOORE.

MR. EDITOR: Why should not our sober NATIONAL TEACHER have some amusing items mingled with its didactics? The aristocratic Eastern weeklies and monthlies, you know, indulge in a whole column of jokes and nonsense, in every issue of the round year. Shall we not, then, unbend a little, in the perusal of the following bits of information which have been selected from examination papers on geography? These papers were written by applicants for teachers' certificates in our county, who, it is hardly necessary to say, for the most part, failed to receive said certificates. We hope no confidence, as an examiner, is violated in excerpts, as they extend over some years of time and no mention of name or place is made. The substance of the questions is given in parenthesis.

(Trade winds and their uses?)

"Trade winds is the atmosphere formed in different localities by the Ocean currents the lower trade winds are a help for sailors the upper trade winds is hoped to be a benefit to the gentleman who has envented the flying baloon."

(Compare latitude and climate of Italy and Canada.)

"Canada is about the 60th parallel north of the Equator, while Italy is about the 80th south of the Equator & is very much warmer, on the account of being so much farther south."

(Course of the waters of Lake Superior in reaching the ocean?)

"They are carried by a small river into lake ontario from thier in to huron from there in the *Niagria* and empties into chespeak bay."

(Uses of the Ocean?)

"They are useful as a reservoir to rec. the wast water; and they influence the Climate by furnishing pure O."

(One manufacturing and one commercial city in France, and two of each in England.)

"France Manufactoring City Brussels Commercial City Pares. England manufactoring town London."

"Danube is in Brazile flows a S: direction and empties in the Caspian S." "Bighyous in Louisiana." "The Rhine is in Asia it rises in the Western part and flows in a south Easterly direction. The Baltic sea is in the southern part of Asia. Gt. Slave Lake is in the Northern part of North or Russian America."——"I haven't time to answer eny mor."

G.

MR. EDITOR: In a late issue of your journal *views on the propriety of offering prizes in teachers' institutes, are solicited.* I served as secretary of a county institute for three successive years in which there were prize contests in spelling and penmanship. The results in every contest were injurious to the true interests and efficiency of the institute. For the sake of brevity we will enumerate as follows:

1. An objectionable inducement was held out to persuade teachers to attend the institute—the prospect of winning a tangible reward in the shape of a dictionary, silver spoons, etc.

2. About two-fifths of the valuable time of the institute was wasted. One hundred words for spelling were selected by each number of the executive committee, making five hundred words, and the spelling and correction of each list of words required from one and a half to two hours. This exercise, taking place in five different sessions, invariably had a tendency to scatter the members of the institute. The first year two-thirds of the teachers present engaged in the contest; the second year, one-half less three; the third, one-fourth plus one. The same person won the highest prize each year. Time was squandered, and interest in the legitimate proceedings undervalued.

3. A spirit of dissatisfaction, crimination and recrimination, arose; which was very unpleasant, and the harmony that should always pervade a teachers' institute, was destroyed.

Whether or not such results would follow in every institute, I can not say, but the experiment in this county justifies a negative vote on the propriety of prizes in teachers' institutes. Neither can the plan obtain any justification in theory.

Allow me to add here, that I never engaged in the contest, and am suffering under no goad of disappointment.

Respectfully, J. N. TAYLOR.

MR. EDITOR: Allow me to add my testimony to the value of monthly written reviews over the daily marking system. I discarded the daily

marking system three years since, and substituted monthly written reviews in all the grades, including the primary, except the lowest. The reviews occur without previous notice. Promotions are made solely on the basis of the written record of the pupil. Our pupils make better daily preparation than under the former system. Pupils are permitted to maintain a place in their classes though not in attendance, provided they keep up their reviews. Many keep up with their class, though in attendance but one or two terms in the year.

I read with interest your late notes upon this feature of our work, and would be glad to learn of the experience of others.

Very truly,

Marengo, Iowa. C. P. ROGERS.

MR. EDITOR: Perry township, in Columbiana county, O., has four rural schools besides the union school in the borough of Salem. The township school board has engaged Mr. J. E. Pollock, the teacher of one of the rural schools, to hold examinations at these schools on Saturdays, taking each one in turn, and thus holding an examination at each school once in four weeks. These examinations are attended by the local directors, some of the parents of the pupils, and by all the teachers—sometimes by other teachers. The plan works admirably. Good results are quite manifest, and more interest in the schools was never before seen.

I have never seen a better method of showing the condition of a school, and the advancement of its pupils. It also serves as a stimulus to the pupils, to learn their lessons thoroughly and acquit themselves well in every exercise and duty in the school. This plan, with some modifications, would be beneficial in other townships. Indeed, a provision for township inspectors would be an advantage to all of the rural schools in the state.

Salem, O., Jan. 26, 1874. G. D. H.

MR. EDITOR: I shall be pleased to learn through your journal whether beginners in reading should print or write the new words. There has been some talk here of having even the youngest children use the script altogether, even before learning the rudiments of writing. Is this a good plan?

Will your lexicographer, Mr. Henkle, explain why "You would better" is preferable to "You had better"? Will he also tell us with which nominative the verb should agree in such sentences as the following? "Either John or they have [or has] blundered." "The first clause or the two which follow form [or forms] the subject of my discourse." "The first two problems or the last one presents [or present] sufficient difficulty." H. C.

MR. EDITOR: Will some one of your readers please answer this question: The difference of time between St. Louis and the mouth of the Ganges River is 12 hours: what is the time at the mouth of the Ganges when it is 5 o'clock P.M. on Thursday at St. Louis? L. H. W.

EDITORIAL DEPARTMENT.

—— Dr. Mayo gives what he calls the university theory of public education, another effective riddling this month. His able argument for the support of high schools and normal schools by the state is made doubly convincing by the happy and forcible manner in which it is stated. We call special attention to his admirable answer to the old English solicitude for working people lest they be "spoiled by over-education"—a solicitude not unfrequently shared by the representatives of the two quasi American aristocracies of wealth and culture, both wishing to make sure their own eminence by keeping the mass of the people as low as possible. This solicitude is purely selfish. Aristocracies have always rested on the service of an ignorant and menial class, and hence the general education of the people seems to endanger their existence. But fortunately the American people are their own guardians and rulers, and the free high school, opening its wide door to the poorest and humblest child, is their answer to the aristocratic fear that aspiring youth may be "educated beyond their sphere."

—— One of the great educational needs of the United States is a system of free high schools that shall place the means of higher instruction within easy reach of country youth. The cities and larger villages of all the more advanced states have very generally established public high schools, with courses of study as extensive as the number of pupils pursuing them seems to justify, but, with few exceptions, only elementary schools are sustained in the rural districts. There are many large counties in which there is neither a public high school nor a good academy. The public schools have nearly supplanted the old academies, but they do not yet take their place as a means of higher instruction for the country. The high schools in cities and towns demand too thorough and systematic preparation for pupils from ungraded schools, and, besides, the cost of board and tuition places them beyond the reach of non-resident youth of limited means. What is needed is a system of free high schools that shall call forth and fit for higher usefulness the valuable talent in our rural population, now so often lost to the country. These institutions are also needed to supply the common schools with better qualified teachers—a fact forcibly presented by Dr. Mayo.

—— It is a great misfortune, we think, that the noble founders of the American system of public education were not as wise respecting the physical needs of childhood as Aristotle, who held that children should not be sent to school before they are seven years of age. If this policy had been adopted in New England, the physical vigor and health of its

people would not to-day be so far below the Grecian standard. The old Massachusetts law permitting children to be confined in school six hours a day *at four years of age*, has done incalculable mischief, vastly more than the amount of study required in grammar schools and high schools. The evil has been aggravated by the kind of school regime to which these little ones have been subjected. Their close confinement has not only been barbarous, but their school duties and exercises have been very far removed from the training of the Kindergarten. The amount of memorizing and abstract reasoning forced upon New England children of a former generation *before* they were seven years of age, will, of itself, account for much of the physical degeneracy now manifest among the people. Stunted bodies and an undue nervous development are the natural results of such an unnatural system. We are glad to see evidences of a wiser respect for the physical rights of childhood.

—— PROF. GOLDWIN SMITH recently delivered an address in Manchester, England, in which he bore pleasing and important testimony to the influence of the American system of non-sectarian free schools, which he believed to be good, morally as well as intellectually. Though there are bad things and bad men in America, the common schools "tend, in the main, to produce not 'clever devils', but a law-loving and God-fearing nation." They promote not only the morality and intelligence of the nation, but also its wealth. He frankly told the English people that they attribute "a great deal too much to formal enactments about religion and morality." What is needed is a moral and religious influence, and this does not necessarily depend on the formal mode of religion. He believed that Cornell University, with its secular system, is just as religious as Oxford, with its "tests upon tests, compulsory chapels, lectures, and a whole apparatus of theology." He, however, conceded "that a moral and religious teacher must exert his influence in order to train the character of the child." We have often advocated that formal and technical religious instruction is not essential to effective moral training in public schools; that what is needed is the presence of religious sanctions and a vital religious influence. We are glad that our view is corroborated by one so competent to declare that "education need not be sectarian", and that non-sectarian schools are not irreligious.

—— A CORRESPONDENT of an Ohio paper calls attention to the fact that many of the examiners of teachers in the state belong to other professions and occupations, and he enters an earnest protest against their appointment. He states that the doors to the other professions are guarded by the members thereof, who only are deemed competent to judge of an applicant's fitness to enter. Lawyers are the examiners of lawyers, physicians of physicians, ministers of ministers, etc. He urges that while men of intelligence and culture in other occupations may be competent to judge of a teacher's scholastic attainments, no one but a prac-

tical teacher can properly test professional qualifications. There is much truth in all this, but the fact is overlooked that many of the members of other professions were once successful and even eminent teachers. It is true that teaching is eminently a progressive art, but this fact does not prove the incompetency of all ex-teachers to be examiners of teachers. Several of the most efficient and useful examiners in Ohio are not now engaged in teaching. As a general policy, however, examining boards should be composed of practical teachers, those who have a personal interest in the advancement of the profession.

—— A RECENT number of *Every Saturday* calls attention to the large and important body of scientific men that form the Philosophical Society in Washington City—the representatives of the Smithsonian Institution, the Coast Survey, Ordnance Bureau, Signal Service, Geological Survey of the Territories, Patent Office, Astronomical Observatory, Lighthouse Board, and the Army and Navy Medical Corps. It adds:

> The presence of so many able men of science at Washington is an argument used by some in support of the plan of a National University to be established there. Since, the advocates argue, there are so many specialists engaged in study and work in government offices, picked men, who yet have but limited support, why not increase the work of each and get the advantage of the best work of the best men in a National University, without incurring the enormous expense of bringing together such professors, if they are to be engaged solely in connection with a university? For an additional thousand dollars, the leisure time of a scientific man can be taken, who could not be engaged, independent of his government work, for three, four, or five times that amount.

The editor thinks that, while the proposed plan of a National University was well combated by President Eliot, the real question, though badly put, has not yet been answered. When we have a National University it will be "the necessary product of national forces, a growth, not a splendid manufacture." This is a significant utterance, coming from under the very eaves of Harvard.

—— PROF. BUCKHAM, of the State Normal School at Albany, N. Y., recently gave a graduating class some practical advice which all young teachers would do well to heed. "See to it", he said, "that you are always *learners;* grow in knowledge; rekindle your enthusiasm daily at the fountain of knowledge." We are specially pleased with this good counsel:

> Begrudge not time, nor study, nor devotion; make your business your pleasure; do with your might what you do. Follow slavishly no formula for teaching; imitate in all things no model; follow sound principles of education as your guide, and work them out for yourselves. But work after a plan; teach with method; keep before you as leading questions, *whom* am I teaching, *to what end* is my teaching directed, *what means* are best adapted to this end, and then make straight and all the time for the result you would reach. In other words, make your profession your study that you may improve.

He plainly told his departing pupils that they must be careful of their reputation, both personal and professional, and that *these can not be separated;* that the public must have confidence in them as *persons* as well as teachers; that nothing will more quickly shatter their reputation "than to be known as indiscreet talkers, or as giddy seekers of pleas-

ure." Young teachers can not be told too earnestly that their success and influence depend quite as much on sterling character as on professional skill.

—— We learn from the *Christian Union* that Supt. Philbrick, of Boston, one of the United States Commissioners to the Vienna Exposition, bears testimony to the excellence of the educational institutions of Vienna. Some of the higher schools for extent and magnificence were not surpassed, nor for thoroughness. One school that he saw extended entirely around the square, and even its main hall was as large and superbly finished as one of our churches. The great superiority that he found was the mode of teaching by practical illustrations, and by the teacher working with his class, the text-books being subordinate and recitations being at a discount. The thoroughness of special preparation on the part of teachers, and the extent of the apparatus provided and actually used, was one reason of the superiority of Vienna schools, this system running down even into the lowest schools.

—— In a report on the study of geography in the public schools of Milwaukee, James Mac Alister, Esq., a member of the school board, urges that less prominence should be given to the topography of local geography, and that more attention should be given to physical and descriptive geography. Instead of attempting to impart a special and minute knowledge of the science of physical geography at the end of the geographical course, he would have the principles of the science "scattered all through the course in systematic order, and then taught in concise form from some brief compend, wherein they are philosophically developed by a master-hand, and without the minutiæ, which are of no importance except to the specialist. While a thorough knowledge of the pupil's own state and country is important, he should also acquire some knowledge of the grand physical characteristics of the "great globe." He also urges that a large portion of the instruction in geography in the primary grades should be given orally, and that map-drawing should be begun in the intermediate grades, and be continued to the very highest. We see nothing particularly new in these suggestions, but there are many teachers who need to hear them. Much depends on the manner in which descriptive geography is taught. Oral instruction must prepare the pupil for the intelligent study of the text-book.

—— A very candid and sensible writer in the last number of the *North American Review* thinks that Dr. Clarke's book on "Sex in Education" lays disproportionate stress upon the dangers of overstudy during the critical period of girls, an error resulting in trifling harm compared with that wrought by other excesses to which Dr. Clarke devotes but a few brief passages. He dwells at some length on the evil caused by errors in diet, and especially errors in dress, too early entrance into society, the

reading of emotional literature—French novels, for instance, and other love-stories—a neglect of proper exercise, "lofty stairs, and hot furnaces." In no civilized country of the world, he says, do girls enter society so early as is customary in America, and "when it is added that every physician knows cases of girls who are really physically unable to go to a party, but who yet rise from their beds to dress for it, and go to it, kept up by the excitement, one need not wonder at the many pitiable cases of invalidism of which he so often hears." He takes no exception to Dr. Clarke's positions, but he objects to the making of overstudy a scapegoat for the many much more harmful errors which fashion favors. "If mothers will remember", he adds, "that study, wisely directed, is one of the best employments of their daughters' minds which can possibly be found, that it is the best means in the world of counteracting the frivolities of society, that without it a woman, however charming to the eye, is but half fitted to be the companion of an educated man, or fitly to understand her position in life, they will be the readier to find that the causes of the early fading of their daughters lie much more in the excesses of society than in those of study." He hopes that Dr. Clarke's book may bring about some needed reforms in the education of girls, but that the work of reform may not rest there.

—— A FEW months since the health inspectors of New York City directed the assistant chemist, Dr. H. Endeman, to submit the air in several of the school buildings to a chemical analysis to determine the amount of carbonic acid and other impurities. He obtained air from several large school buildings, and its analysis showed the presence of 14.6 to 28.1 parts of carbonic acid in 10,000—the standard of permissible impurity being fixed by the best sanitary authorities at 6 parts in 10,000. The air in one recitation-room, with one window opened, yielded 17.2 parts of carbonic acid gas, and in ten minutes after the window was closed it yielded 32.2 parts! The air from the different buildings contained not only this excess of poisonous gas, but also effete animal matter and other impurities. The examination demonstrated the inefficiency of ventilating flues in the wall *unprovided with means for creating an upward current.* When will this important fact be understood by school officers and teachers? A ventilating flue must either be heated or be supplied with mechanical means for producing the necessary draft. It is surprising that ventilating (?) flues which can not have the least draft, are still put into school buildings, even in cities. The report also reiterates the oft-stated fact that ventilation secured by opening the windows, is detrimental to the health of children who sit near or directly under them.

—— IN his late address on "Education by the State", Supt. Hancock, of Cincinnati, shows that there is no absolute form of government which is best for all conditions of people, and that there is nothing in nature or philosophy or history which justifies the *ex-cathedra* opinions, recent-

ly put forth, respecting the limitation of the functions of government. No civilized state has ever been conducted on the principle that the whole duty of government is exhausted in the use of force to protect its citizens in person and property and to keep the peace. This police theory of government has no foundation in history. He then proceeds to show that the state has as much right to teach a man honesty as it has to punish him when dishonest; that education as well as punishment is a function of the state, and that the exercise of this function by a free state is both expedient and necessary. He then considers the arguments of those who would limit the educational function of the state to the providing of education for the children of the poor only or an elementary education for all classes. The only limitation found is that made necessary by the condition and financial resources of the people. It is the duty of every community to educate to the extent of its ability, even to the support of a university free to all of its youth. Mr. Hancock has evidently given much thought to this subject, and his views are clearly expressed and ably supported.

—— At the late meeting of the Indiana Teachers' Association, the President, Supt. J. H. Smart, of Fort Wayne, delivered an able address, in which he earnestly advocated the importance of increased attention to moral training in public schools. The chief remedy for the multiplied evidences of wide-spread corruption and immorality in the country he believed to be the training of the pupils in our schools to habits of right-doing and the inculcation of "the soundest moral precepts and the highest Christian principles." While parents are largely responsible for the moral training of their children, it is also the duty of teachers to inspire their pupils with a love for the true, the beautiful, and the good; to lead them to higher purposes, better thoughts, and nobler ambitions; and to teach them to consider rightly their obligations to their Creator and their relations to their fellow-men. He also considered, at some length, the question of higher education by the state, reviewing the recent utterances of President Eliot and others as aimed at high schools as well as state and national colleges and universities. The logical outcome of these insidious arguments is stated very clearly and their danger exposed.

NATIONAL EDUCATIONAL ASSOCIATION.

The meeting of the Superintendents' Department of the National Educational Association, held in Washington, D. C., January 29th and 30th, at the call of the President, Supt. J. H. Binford, of Richmond, Va., was attended by some fifty state, city, and county superintendents, and other educators. After a brief and sensible opening address by the President, and a cordial welcome to the delegates by Supt. J. O. Wilson, of Washington, invitations to attend the sessions were extended to the members

of the committees on Education and Labor and the Centennial committees, in both houses of Congress, to the President and Cabinet, and to the Executive of the District. On motion of Commissioner Eaton, the members then proceeded to pay their respects to the President, the Secretary of the Interior, and Governor Shepherd.

When the convention re-assembled, Supt. Luckey, of Pittsburg, read an interesting paper on school statistics, which was discussed by Supt. Bicknell, of Rhode Island, Supt. Wilson, of Washington, Supt. Creery, of Baltimore, Supt. Parish, of New Haven, Supt. Philbrick, of Boston, Supt. Stevenson, of Columbus, O., Supt. Farnham, of Binghamton, N. Y., Supt. Wickersham, of Pennsylvania, Supt. Hopkins. of Indiana, and Commissioner Eaton. The report was referred to a special committee, consisting of Supt. Harvey, of Ohio, Supt. Creery, of Baltimore, Supt. Philbrick, of Boston, Sec'y Northrop, of Conn., Prof. Atkinson, of Virginia, and Supt. Rickoff, of Cleveland, O. At the evening session President White, of Cornell University, made an able address on scientific and industrial education, in which he reviewed the addresses of Presidents McCosh and Eliot before the National Association last summer. He made an earnest plea for both state and national provision for higher education, and a spirited defense of the institutions founded by the Agricultural College Grant.

At the second day's session, Commissioner Eaton, chairman of the committee on the Centennial Exposition, made a report recommending—

First. That each state and territory be invited to prepare a representation of its educational condition.

Second. That they be invited to prepare a historical representation of their progress in education.

Third. That the cities be requested to participate as cities in the educational representation of their respective states.

Fourth. That educational institutions be similarly invited to join in the representations of their respective states, showing their respective condition, and historically their progress.

Fifth. That this department, from an educational standpoint, urge the desirableness of a United States census in 1875.

Sixth. That this department of the National Educational Association recommend that, in addition to the formal invitation of our Government to participate in the Centennial Exhibition in 1876, the Commissioner of Education be requested, in behalf of the educators in the United States, to correspond with the educators in other parts of the world, extending to them our cordial and professional invitation.

Seventh. That the department approve the organization and assembly of an international congress in connection with the Centennial Exhibition.

The report was adopted.

Supt. Ruffner, of Virginia, chairman of the committee on National Aid to Education, made a report recommending the following action:

First. That this convention strongly approves the policy, hitherto pursued by the Federal Government, of leaving the people and local government of each state to manage their own educational affairs without interference, believing that the principle on which this policy is based is as sound educationally as it is politically.

Second. That this convention acknowledges the great services done to the cause of education by Congress in establishing and maintaining a

Department of Education similar in principal to that of Agriculture and Statistics, whereby appropriate information from all points of the world may be gathered, digested, and distributed, and whereby a number of important ends may be subserved in connection with the practical work of education. It would also acknowledge specially the very valuable service already done by the Bureau of Education, and would venture to express the hope that its measure of usefulness may be increased.

Third. That this convention most heartily indorses the proposition, already under consideration by Congress, to set apart the public lands of the United States exclusively for the purposes of free education in the states and territories, and it also approves the proviso that, at least for the present, the basis of division shall be illiteracy existing in the several states in the population from ten years old and upward, but would deprecate the attachment to such grant of any condition which would embarrass its use in any state, excepting the sole conditon needed to insure its application to the objects for which it is given.

Fourth. That this convention favors such united action on the part of the special friends of primary and of agricultural and other industrial education respectively, as would allow the various states and territorial legislatures to employ twenty-five per cent of such donated funds for the purposes of industrial education.

The report was adopted.

Supt. Wickersham, of Pennsylvania, chairman of the committee on education in the District of Columbia, made a report, concluding with a resolution that it is the duty of Congress to furnish special aid to the school authorities of the District. The resolution was adopted.

Supt. Philbrick, of Boston, read an elaborate and valuable paper comparing the systems of public instruction in European and American cities; and General Hawley and Judge Kelley made brief addresses on the Centennial.

The convention was honored by a visit from the President, Secretary Delano, and Governor Shepherd, and, at the close of the session, Governor Shepherd gave the members a banquet.

The proceedings are to be published by the Bureau of Education in the next circular of information, and all interested can procure a copy.

THE DISCIPLINARY VALUE OF SCIENCE.

It is claimed by a noted theorizer on education that the facts of natural and physical science are more useful than other kinds of scholastic knowledge, and, from this claimed superior utility, he argues the superiority of science as a means of mental discipline. In other words, the utility of knowledge is made the source of its educational value. On this theory no system of education is possible, since it involves the impossibility of determining, *a priori*, what knowledge as knowledge the student will actually use in life. Natural philosophy, for illustration, is one of the most useful and practical of the natural sciences, and yet very few of its facts and principles are ever directly or consciously used by the great majority of graduates. Who, standing at the threshold of this study, can separate the facts which he is to use from those which he is not to

use? And how is the one class of these facts to be acquired without the aid of the other?

The supposition that the use or non-use of knowledge determines its disciplinary value, also involves the absurdity that each fact is able, by a sort of prophetic power, to look into the future, and, on the ground of its use or non-use, to lend or withhold its strengthening aid to the unfolding mind! On such a theory as this, mental discipline would be unattainable to the student destined to be cut off by death before the termination of his school life. Nor can the absurdity of this theory be avoided by classifying knowledge, and inferring the disciplinary value of a class of facts from the usefulness of a portion of such facts. How are the useful to lend their virtue to the non-useful? Equally futile is the attempt to attach this disciplinary value to the utility of knowledge to students as a class. The moment this is attempted, the whole theory has to be abandoned.

The truth is, the attempt to base a system of education on the practical utility of specified knowledge is utterly utopian, whatever may be true respecting the "harmony of nature." The disciplinary value of knowledge depends solely on its relation to the mind. The mental faculties require for their growth and nurture certain kinds of knowledge, and it is through the acquisition of this knowledge by proper methods that the mental faculties are developed and disciplined. When knowledge that is adapted to meet the educational wants of the mind, has the further merit of practical application in the business of life, it is to be preferred to knowledge which lacks such practical utility. But the highest practical result of school training is *thought*. Mental power is used constantly in all the duties and relations of life.

Great stress is put on what is called the natural exercise of the mind on life's duties. But the study of science has no special merit in this direction, except so far as it trains the judgment in weighing probabilities and the reason in following the guidance of induction. In the process of education science has, it is true, a place and function of the highest importance. It sustains as vital a relation to the complete development of the mind as air or water or food doês to the growth of the body. But as food can not take the place of either air or water in the nurture of the body, so natural science can not fill the office of language or mathematics in the development and nurture of the mind. All these must be conjoined—and the true methed of this union is one of the great problems of education.

EDUCATIONAL INTELLIGENCE.

—— When notified that a subscriber has failed to receive any number of this journal due him, we always remail it.

—— The whole number of persons attending school in Oberlin in 1873 was 3,317, the number in the college being 1,371, in the telegraphic institute, commercial schools, and other private schools 1,025, and in the public schools 921. Oberlin is largely a community of students, and education is *the* business of the place.

—— THE revived State Normal Shool of Rhode Island has graduated its fourth class, with cheering evidence of increasing prosperity. The number of pupils enrolled the last term was 113. In his excellent address to the graduating class, Prof. Greenough urged the importance of moral training.

—— WE believe that Mr. J. Davis Wilder, Chicago, Ill., does as good work in making and repairing slated blackboards as is done in the country. He has made this business a specialty for years, and his work is strongly commended by many of the leading educators of the West. His liquid slating stands the test of schoolroom use.

—— SUPT. EASTBURN, of Bucks County, Pa., has prepared a blank for school statistics, which requires his teachers to report information showing what progress they are making in school management and instruction and in professional improvement. He intends to make his annual institute result in actual progress in the schools.

—— A COUNTY examiner has called the attention of the State School Commissioner of Ohio to the evils which many school districts in the state suffer from too much division into sub-districts He states that in many townships there are from eight to ten of these sub-districts in which the attendance during the winter months is too small to support a good teacher, and in the summer months it averages but eight or ten pupils.

—— Supt. ANDREWS, of Steubenville, O., advocates the use of the phonic method of teaching primary reading, with the notation marks of Webster. He holds that children can learn the sounds of the letters, thus indicated, as readily as by Leigh's method, and the knowledge is of practical utility after they have learned to read. The first reading lessons are placed on the board in both print and script letters, and the pupils read both from the very first.

—— THE new building for the Free Academy of Rochester, N. Y., erected at a cost of over $125,000, is completed. It is of the French Gothic style of architecture, and has four stories and a basement. Great attention has been paid to heating and ventilation, and it is believed that the system adopted will prove a complete success. The ventilating flues are to be heated, thus securing the necessary draft. Rochester is to be congratulated on the possession of one of the finest school buildings in the country.

—— THE New York *World* has been vigorously ventilating the subject of ill-ventilated schoolrooms. It says that, owing to the ignorance and incapacity of architects and school officers, "an immense number of children in this country pursue their studies in a poisoned atmosphere and drink in disease while they are learning to spell and cipher." There is too much truth in this startling statement. The board of education of New York City is making an effort to learn how to supply the schools with pure air.

——The *Princeton* (N. J.) *Press*, in announcing an elocutionary entertainment by Prof. Robert Kidd, of Indiana, states that for the last ten years he has given annually one or more such entertainments in Princeton, and that "those who have heard him, agree in the opinion that in his ability to blend valuable instruction, with rational entertainment, and rich amusement, he has but few equals and perhaps no superior." Prof. Kidd teaches elocution in Princeton Seminary. He has recently given several very successful entertainments in Philadelphia.

——Prof. Lafayette C. Loomis, Washington, D.C., announces arrangements for summer tours to Europe, including a tour of Switzerland and a tour of Italy. The price of the Swiss round-trip ticket, covering the entire expense, is $350 in currency, and the price of the Italian round-trip ticket, covering all expenses except hotel charges in Italy, is $375 in currency. The party will leave New York about the 25th of June, and return on or before the 31st of August. Circulars of information may be obtained of Prof. Loomis, or J. W. Schermerhorn & Co., 14 Bond St., N. Y., or W. S. Stevenson, 39 West Fouth St., Cincinnati, O.

——The public schools of Zanesville, O., have been so classified that the interval between the classes is only *one term*, instead of one year, and all the classes are examined twice each term, the first examination being preliminary—and promotions are made and the classes re-adjusted at the end of each term, or three times each year. This sensible plan has been adopted to remedy the evil of the plan of yearly promotions, which prevents the more capable pupils from advancing faster than those possessing less ability, and also results in serious loss to the majority of pupils who fail fo secure promotion.

——The Illinois House of Representatives has passed a bill requiring all children between nine and fourteen years of age, to be sent to school three months each year, at least six weeks of such attendance being consecutive, or to be instructed at home or elsewhere three months each year in the common branches, unless the physical or mental condition of the child is such as to render such attendance inexpedient or impracticable, or unless the child shall be reasonably proficient in such branches. The provisions to secure an enforcement of the law are carefully drawn. We have not learned (Feb. 24th) the fate of the bill in the Senate.

——The trustees of Kenyon College, Gambier, O., have requested President Tappan to nominate a Professor of Mathematics.——Ex-Senator Doolittle, of Wisconsin, was installed as president *pro tem.* of the University of Chicago, Jan. 19th.——Prof. G. W. Hoss, late principal of the State Normal School of Kansas, has accepted his former position as professor of English Literature in the Indiana University.——It is expected that Rev. E. O. Haven will succeed Rev. Dr. Comings as president of Wesleyan University, Conn.——Alexander Agassiz succeeds his father as trustee of the Museum of Comparative Zoölogy, Cambridge, Mass.——Mrs. Badger, one of the four ladies elected members of the Boston School Committee, has become insane, but, so far as we know, the cause has not been stated.

—— We stated last month on what we supposed was good authority, that the four ladies elected members of the Boston School Committee had been admitted to seats by a vote of 77 to 17, and assigned places on the standing committees, but *Harper's Weekly* of Feb. 14th announces that the school committee, by a considerable majority, has refused to allow them to serve. Another exchange states that the seats were declared vacant by a vote of 45 to 42, with 26 members absent. Several of the majority declared that they were in doubt respecting the legal right of the ladies to their seats, and they wished the question to be decided by the Supreme Court. We are pleased to be able to add that the Court has come to their relief by deciding (Feb. 20th) that a woman can be a member of the Boston School Committee. This settles the question for Massachusetts.

—— The last Circular of Information issued by the National Bureau of Education gives a concise account of the college commencements in the United States in the summer of 1873, with a tabular summary of the degrees conferred, and the amount of donations and bequests received by the institutions mentioned. The whole number of persons receiving the degree of bachelor of arts in course, was 1,861, honorary 5; master of arts in course 735, honorary 114; bachelor of philosophy (Ph. B.) in course 93, honorary 3; doctor of philosophy (Ph. D.) 31, honorary 16; bachelor of science (Sc. B.) in course 486, honorary 2; master of science (Sc. M.) in course 51, honorary 10; bachelor of divinity (D. B.) in course 59; doctor of divinity, honorary, 130; doctor of medicine in course 503; bachelor of laws in course (LL. B.) 504; doctor of laws, honorary, 84. The total number of degrees of all kinds conferred in course, was 4,493, honorary 376. Many of these degrees were conferred by institutions which are in fact only academies. The total amount of donations and bequests received by ninety-four institutions in the year was $4,216,886, of which $1,609,977 may be used for general purposes, $1,340,705 as endowment funds, $530,610 for building purposes, $289,000 for professorships, and the balance for several special purposes named. The new Vanderbilt University, Nashville, Tenn., received $500,000 (the largest benefaction); the college of New Jersey, Princeton, 386,000; Columbian University, Washington, D. C., $200,000; Yale College, $196,284; Cornell University, $185,000; Bates College, Lewiston, Me., $177,000; Harvard University, $158,075; California State University, $137,000; Wittenberg College, Springfield, O., $119,000; Albion College, Albion, Ill., $110,000; and Wells College for Women, Aurora, N. Y., and the Agricultural and Mechanical College, Auburn, Ala., each $100,000.

Ohio.—A bill has been introduced in the General Assembly providing for the admission of colored youth to the public schools whenever separate schools, furnishing them school advantages equal to those enjoyed by white youth, are not organized and sustained; and another bill by Mr. McCoy authorizing the appointment of commissioners to prepare a series of school books for use in the common schools of the state. This is one of the most ridiculous measures ever introduced in the General Assembly. It proposes to pay three commissioners or authors, to

be appointed by the Governor, $2,000 each for preparing, for the state, text-books, corresponding in number to those now in use in the common schools, and then to give "any one" the right to publish these books, and, when published, all boards of education are required, under severe penalties, *to adopt them for exclusive use in the schools of Ohio* FOR TEN YEARS—whatever may be their character or price, or want of adaptation to improved methods of teaching, and whatever the expense of such a sweeping change of books to the people! The man who supposes that series of readers, spellers, arithmetics, geographies, grammars, writing books, drawing books, music books, etc., fit for use in Ohio schools, can be furnished by such cheap job work as this, must have a funny idea of authorship and the present condition of education. Ohio has never had a General Assembly foolish enough to pass such a bill. There is evidently a set-up job under it.

—— THE annual reports of the Ohio Institutions for the Education of the Deaf and Dumb, and the Blind, for the year 1873, attest their excellent management, and consequent prosperity. The immense building, so recently erected for the Deaf and Dumb, is already crowded and more room is needed. The number of pupils in December last was 393—an increase of 55 on last year's attendance. Supt. Fay recommends, as a measure of temporary relief, that the admission of the youngest pupils be postponed, and that additional accommodations be provided, as soon as practicable, by the erection of an adjacent building for a juvenile department of some fifty pupils, to be under the immediate supervision of women—an excellent suggestion. The new building for the Blind is approaching completion, and will be ready for occupancy at the opening of the next school year. In architectural appearance and internal arrangement and construction, it will be a credit to Ohio, whose public buildings are among the best in the country. A recent visit to the institution increased our confidence in Supt. Smead's fidelity and skill. He is doing an excellent work.

NOTICES OF PERIODICALS.

THE TENNESSEE SCHOOL JOURNAL is the title of a new educational monthly, published under the auspices of the State Teachers' Association, and made the official organ of the State School Department. It is edited by Col. John M. Fleming, State Superintendent of Public Instruction, who is assisted by four associate editors. The opening number is a guarantee of its great usefulness, and we hope it may be heartily sustained by the teachers and friends of education in Tennessee. It contains twenty-four pages, small folio size, double column, and is printed in a very creditable manner. The subscription price is $1.50 a year.

THE EDUCATIONIST, edited by Supt. A. C. Shortridge and Geo. P. Brown, Indianapolis, Ind., closes its first volume with the March number. It opened well, and has steadily improved. The volume contains several very valuable articles on teaching. We hope that its size and price may both be increased. The subscription price is $1.00.

THE COMMON SCHOOL, edited by Supt. W. E. Crosby, Davenport, Iowa, has made a promising beginning. It discusses with vigor and good judgment the many vital questions connected with public education, while its more special aim is the presentation of principles and methods of teaching. The first two numbers contain each sixteen pages, small folio size, double column. It is printed on tinted paper. The subscription price is $1,50 a year.

THE RHODE ISLAND SCHOOLMASTER has entered on its twentieth year with the prospect that the current volume will be equal, at least, to the best of its predecessors. This is an assurance that it will maintain its high rank among the educational journals, few of which contain as many articles of practical value. We will send the TEACHER and the *Schoolmaster* to one address for $2.50 a year.

EVERY SATURDAY (H. O. Houghton & Co., Boston) has a new editorial department of two pages, in which current topics and events receive attention. This feature adds much to its interest and value. The new serial, "Far from the Madding Crowd", justifies the remark of the *London Spectator*, "If it is not written by George Eliot, then there is a new light among novelists." The "new light" is Thomas Hardy.

HARPER'S MAGAZINE for March contains nineteen articles and over seventy engravings. "The Light-Houses of the United States", "Observatories in the United States", "Bermuda", "Archibald Constable and His Friends"—a graphic description of the literary celebrities of Edinburgh fifty years ago—are among the capital papers. The Editor's Easy Chair pays a graceful tribute to the late Professor Agassiz. The Scientific Record brings its summary of intelligence to the close of 1873.

—— MESSRS. ESTES & LAURIAT, Boston, Mass., propose to issue several volumes of "HALF-HOUR RECREATIONS IN NATURAL HISTORY." Each volume will contain twelve parts, of about thirty-six pages each, and, though elegantly illustrated, they will be sold for 25 cents a part, or $2.50 per volume. The first volume entitled "Half-Hours with Insects" is to be edited by A. S. Packard, Jr., the distinguished entomologist and editor of *The American Naturalist*. The first part, treating of the "Insects of the Garden", is excellent. Each of the succeeding volumes will be edited by a competent naturalist, one who has made a specialty of the branch of natural history treated.

—— MR. J. H. SAMPSON, Columbus, O., general agent for A. S. Barnes & Co., New York, has published a series of "Parsing Blanks" for the use of pupils in the preparation of lessons in parsing. The series has a separate blank for each part of speech, so ruled and headed as to prescribe a definite form and manner for parsing it. Each blank also contains a word, parsed in full as an illustration or model. The use of these blanks will save much time in the writing of parsing lessons and the correction of the papers, and, at the same time, system and thoroughness will be secured.

"THE BOOK-BUYER", published by Scribner, Armstrong & Co., New York, is a monthly bulletin of their publications, and the importations of Scribner, Welford & Armstrong, New York, including a long list of the most recent English publications. It also contains an interesting summary of foreign current intelligence, prepared monthly by Mr. Welford. Its price is only 25 cents a year.

HARKNESS' MAGAZINE (John C. Harkness, Wilmington, Del.) has a number of departments, including literary, educational, young Americans', manufacturers and mechanics', editorial, etc. It gives due attention to local interests, and we trust is well sustained by home patronage. It is published quarterly, and is furnished at the low price of $1.00 a year.

THE MISSIONARY HERALD has entered on its seventieth volume, with no abatement in interest or vigor. It is filled monthly with information respecting the work of Foreign Missions, and the condition and progress of the people in the wide field, occupied by the American Board. The subscription price is $1.00 a year. Address Charles Hutchins, Congregational House, Boston, Mass.

—— THE publisher of *Demorest's Monthly Magazine* presents the large and beautiful oil chromo, "The Old Oaken Bucket", to each subscriber. See his announcement in our February number.

NEW BOOKS RECEIVED.

ESSAYS ON EDUCATIONAL REFORMERS. By Robert Herbert Quick, M.A. 12mo. 332 pp. Cincinnati: Robert Clarke & Co. Retail price, postpaid, $2.00.

ANALYSIS OF THE ENGLISH LANGUAGE. By Samuel S. Greene, LL.D. 12mo. 324 pp. Philadelphia: Cowperthwait & Co. Price, $1.20.

MODEL DIALOGUES. A New and Choice Collection of Original Dialogues, Tableaux, etc. Compiled by William M. Clark, Editor of *Schoolday Magazine*. 12mo. 375 pp. Philadelphia: J. W. Daughaday & Co. Price, postpaid, $1.50.

TRAINING OF THE VOICE IN ELOCUTION. By M. Josephine Warren, Teacher of Elocution, Philapelphia. 8mo. 56 pp. Price, postpaid, 50 cts.

SCHEM'S STATISTICS OF THE WORLD. Semi-Annual Publication. November, 1873. Edited by Prof. Alexander J. Schem. New York: G. J. Moulton. Price, postpaid, 50 cts.

SCHOOL REPORTS.

Fifth Biennial Report of California. 1872 and 1873. Henry N. Bolander, State Supt.

Annual Report of Pennsylvania. 1872–73. J. P. Wickersham, State Supt.

Annual Report for the Province of Quebec. 1872–73. G. Ouimet, Minister of Public Instruction.

Fourteenth Annual Report of Minnesota. 1872–73. H. B. Wilson, State Supt.

Third Annual Report of Georgia. 1873. Gustavus J. Orr, State Commissioner.

Annual Report of Rhode Island. 1873. Thomas W. Bicknell, State Commissioner.

Twentieth Annual Report of the City and County of San Francisco, 1872-73. J. H. Widber, Supt.
First Annual Report of West Des Moines, Ia. 1872-73. J. H. Thompson, Supt.
Eighteenth Annual Report of the City of Peoria, Ill. 1873. J. E. Dow, Supt.
Manual of the Public Schools of Fremont, O. W. W. Ross, Supt.
Manual of the Schools of Macon, Ga. 1873. B. M. Utter, Supt.
The Maryland Institution for the Education of the Deaf and Dumb. 1873. Chas. W. Ely, Principal.
Ohio Institution for the Deaf and Dumb. 1873. G. O. Fay, Supt.
Ohio Institution for the Blind. 1873. Geo. L. Smead, Supt.

CATALOGUES.

Calendar of the University of Michigan, Ann Arbor, Mich. 1873-74. James B. Angell, LL.D., President.
The Cornell University Register. 1873-74. Ithaca, N. Y. Andrew D. White, LL.D., President.
Nebraska State University, Lincoln, Neb. 1873. A. R. Benton, D.D., President.
College of Fine Arts of the Syracuse University, Syracuse, N. Y. 1874. G. F. Comfort, A.M., Dean.
Tufts College, Boston, Mass. 1872-73. Alonzo A. Miner, D.D., Pres't.
Marietta College, Marietta, O. 1873-74. I. W. Andrews, D.D., Pres't.
Brown University, Providence, R. I, 1873-74. E. G. Robinson, D.D., LD.D., President.
Ohio Wesleyan University, Delaware, O. 1872-73. Frederick Merrick, D.D., President.
Western Reserve College, Hudson, O. 1873-74. Carroll Cutler, D.D., President.
National Normal School, Lebanon, O. 1873. A. Holbrook, Principal.
Northwestern Normal School, Republic, O. 1873-74. J. Fraise Richard, Principal.
Pennsylvania State Normal School, Millersville, Pa. 1872-73. Edward Brooks, A.M., Principal.
Nebraska State Normal Shool, Peru, Neb. 1873. T. J. Morgan, Princ'l.

PAMPHLETS.

The Liberal Education of the Nineteenth Century. By Prof. William P. Atkinson. Reprinted from the *Popular Science Monthly*.. New York: D. Appleton & Co.
The Education of the People the Hope of the Republic. An Address by Prof. Wm. F. Phelps, M.A., Winona, Minn.
Report on Compulsory Education. By Dexter A. Hawkins, New York City.
The Science of Penmanship. By H. A. Mumaw, Elkart, Ind.
Proceedings of the Chester County Institute, Pa. 1873. H. F. Pierce, County Supt.
The State Normal School at Winona, Minn: Its Financial History and Management.
Columbus Nursery, Ohio. 1874. R. G. Hanford, Proprietor.
Notes on the First Book of Benson's Geometry. By Lawrence S. Benson. New York: James S. Burnton.
An Address before the American Colonization Society, January, 1873, by Edward P. Humphrey, D.D., LL.D., Louisville, Ky.

——We will furnish The National Teacher and *Littell's Living Age*, one year each, for $8.00; the Teacher and *Lippincott's Magazine* for $4.00; the Teacher and the *College Courant* for $3.50; and the Teacher and Northrop's "Education Abroad" for $2.50.

THE

NATIONAL TEACHER:

A MONTHLY EDUCATIONAL JOURNAL.

Vol. IV. APRIL, 1874. No. 4.

AGASSIZ AS A TEACHER.

No man in the mighty host of the world's teachers was greater than Prof. Agassiz, so recently fallen. He was many-sided, and had points of contact with kings and emperors and with the humblest children.

He was a teacher all his life,—a professed teacher. He was a professor in virtue of his being connected with universities in the old world and in the new; but his professional teaching was but a small part of his teaching work. He taught every body whom he met, not in a dogmatic way or with an air of superiority, but in a love of truth and with the docile spirit of a child. He took every one into his very heart, and inspired all with his own strong love of knowledge. The little boy who brought to him a pretty pebble or shell, soon found the plaything full of wonders and connected with other wonders, until his little soul became perfectly enthusiastic in its eagerness to know more. It was the same when he stood before his classes or lectured before the most intelligent public audiences. He and his hearers were lost in the subject and in gazing down opening vistas of thought and research, stretching away into infinity.

He was the greatest living teacher, because he was a constant learner, and was always aglow with that inspiration which comes from fresh thoughts and fresh knowledge. His greatest lectures were merely the revelation of himself as studying aloud, the hearer being taken into his confidence and the two

asking the questions and working out the answers together. Many teachers and lecturers simply cast seed—often old and mouldy—upon frozen ground; but Agassiz in his kindling enthusiasm brought with him sunshine and shower, and prepared the soil for his broadcast sowing.

No man ever came in contact with him for an hour without feeling the contagion of his enthusiasm. The writer of this brief sketch once entered a car in western New York, and found Prof. Agassiz in it holding patiently a large pail of water containing some very young fishes (gar-pikes), which he was desirous to take home to Cambridge that he might watch their growth and development. The pail could not be placed upon the floor, for the water would be spilled by the rocking of the car, and the professor's hand and arm were weary. I relieved him for awhile and that left him free to talk, and the wondering passengers gathered about him and soon all had caught his enthusiasm about the wonderful fishes and the wonderful changes that were to befall them.

When a young man in Europe, Cuvier had given him for study all the fossil fishes of his great collection, and indeed all the fossil fishes then found in Europe, were placed in his hands. One great group, with very hard scales, puzzled him beyond measure, and he could get no clue to their affinities, until one day he chanced to find in some museum a dried skin of an American gar, showing similar scales. This discovery threw a flood of light upon his old paleozoic ganoids, and enabled him to give them their true place in the great system of Nature. But the professor had never obtained the young of the gar before, and now he was about to study the growth and changes of a fish that had years before helped him to bridge over the vast geological periods since fishes of the same type sported in the paleozoic waters. Doubtless at first many of the passengers had a sort of contemptuous pity for the man, as they saw him patiently holding up from the floor the heavy tin pail containing some worthless minnows, and thought that so fine and noble a looking man ought to be in some more profitable business. But when he talked, and they found the worthless minnows became the germ of a great theme, they passed from pity to wonder and from wonder to admiration. This was teaching in its highest and best sense.

He often lectured in the State Normal Schools of Massachusetts, and, with his rare power of crayon delineation, always

made the pupils see what he saw, and kindled within them a measure of his own enthusiasm. He exhausted no subject, leaving the pupil to think that nothing remained. At whatever point he began, his theme branched out into infinity—there were always grander things beyond. His life was, indeed, quite like his themes. It was not a circle closing around completed results, however great; it was a marginal life, lived along the hither edge of the great unexplored realm of Nature. His achievements were very great, but his plans and hopes were vastly greater. But as a teacher he has inspired thousands with his own spirit, and they will carry out his plans of investigation and his work will go on.

It will not be possible, in a short article, to speak of his own contributions to science. They were geological and paleontological in part, but his greater labor was in departments of Natural History, in the study and classification of living forms of animal life.

In all his studies he was a reverent believer in a great personal God, and the creation was only an expression of His thoughts. He had no sympathy whatever with any of the schemes of those who praise the creation and deny a Creator; who believe in "an order but not in an Ordainer." He would allow no one to undervalue Nature, as quite too many have done. It was all divine and sacred to him. In the last of his published articles, we find his philosophic mind summing up all knowledge in the following grand words:

"It can not be too soon understood that science is one, and that whether we investigate language, philosophy, theology, history, or physics, we are dealing with the same problem, culminating in a knowledge of ourselves. Speech is known only in connection with the organs of man, thought in connection with his brain, religion as the expression of his aspirations, history as the record of his deeds, and physical science as the law under which he lives. Philosophers and theologians have yet to learn that a physical fact is as sacred as a moral principle. Our own nature demands from us this double allegiance."

The work of Agassiz will long live, and his name will pass down the ages with the great names of Cuvier and Von Humboldt. He was at once a naturalist and a philosopher, but when he came to make his will, he added to his name the title he honored most,—that of "*teacher*", and the starred name of "Louis Agassiz, teacher," will stand at the head of the roll of the great teachers of the world. E. B. A.

GERMAN AND AMERICAN SCHOOL MATTERS.

MR. EDITOR: The articles in which Prof. Wm. H. Young describes the whole of the school organism in the Grand Duchy of Baden, as a fair specimen of the German school organisms in general, and especially the last article in which he draws a comparison of German and American school matters, must be classed with the most valuable contributions to your valuable publication. The author of those articles has (every candid mind among German-born teachers must concede this much) carefully studied his subject and diligently tried to do it full justice; and his comparison of German and American schools is fair and well-balanced. Permit me, however, to add some facts concerning German schools to those by him presented.

Prof. Young does not mention the fact that the German elementary schools of now-a-days are inferior to the same schools as they were twenty years ago; that the wide-spread renown of those institutions *was then well deserved*, while it is not now; and that most of the strictures to which he subjects the present schooling, were not applicable to that of former times. There are many German teachers in this country who have been both pupils and teachers in the former better schools, and who will readily testify to the correctness of what I here state.

During the revolution of 1848, the German governments became aware of the fact that most of the teachers in the public schools were active republicans, or at least democrats and liberal-minded in many respects; that the public schools had raised a generation of self-thinking and mentally independent men and women; and that school government had been too liberal, as they called it. It was evident that Germany must become a republic, and that the State Church must go to the wall, if this liberal school government should continue. Consequently strict measures were taken, first in all the larger, and at last also in the minor states, to prevent this "dreadful calamity", and those famous *regulations* were issued which intentionally lowered the standard of learning, moral character, and social position of the teachers, and likewise the standard of public-school education of the pupils. These regulations have been in existence for now twenty years, and as most of the better teachers had been exiled or driven out of employment, and the teachers' salaries were not raised in proportion with the prices of first necessities, nay intentionally kept at the lowest

possible figure in order to break the independent spirit of the fraternity, they have been exceedingly successful. The intention was, and is, to make of the Germans a kind of Chinese, uniformly able to read, write, and cipher just enough for subjects of despotic governments, but unable to think, observe, and act for themselves in matters of conviction—as far as the laboring mass of the population is concerned—and to impart the best possible education to the ruling and well-to-do classes, so as to render them able to govern the "vile multitude." This intention has so well succeeded, that the teacher's vocation is no longer attractive for the better talented and mentally independent young men, and thousands of public schools do no longer find teachers at all, while other thousands are officered by school-*præparandi* of the poorest attainments. There are some few teachers and schools left—especially in larger cities and those under private direction—exhibiting still the old excellence, and the higher institutions of learning have, of course, never lost it; but their proportion to the whole number grows signally less from year to year, as the teachers emigrate or die out who have seen the better times.

It is, therefore, advisable for those Americans who wish to acquaint themselves with the best schools that ever existed, to study not the present German public schools and their government, but such schools in this country as have been founded or administered by the great number of German teachers of the old school who were exiled by the revolution of 1848; and as their number is already considerably thinned out by death and transition to better-paying vocations of life, there is not much time to lose for such study.

We heartily agree with Prof. Young in the statement, that "we should make many mistakes in attempting to graft much that is German upon our educational system"; with the limitation, however, that there is no such danger in attempting to graft much that is German-American upon that system—witness Mr. Andrew J. Rickoff, or Mr. J. W. Dickinson, or Mr. Sheldon, of Oswego, or any number of equally distinguished professional men. The comparatively best exhibit of the pedagogical views of the most experienced German-American teachers, is to be found in the "Proceedings of the Third Annual Conference of German-American Teachers, held in Hoboken, 1872."*

*This volume is to be had from L. W. Schmidt, 24 Barclay St., N. Y.

There is another fact concerning German schools, which seems to have escaped Prof. Young's notice, to wit, that the best feature of these schools, past and present, consists in the existence of German universities, as a basis to the educational system. It is through the agency of these highest institutions of learning that are trained the principals and assistant teachers of Normal Schools, the whole hierarchy of school commissioners and inspectors; in short, the entire body of men who govern the system of public schools. Pedagogy being in these universities a distinct branch of study, taught by a number of professors of a variety of views, from a variety of scientific standpoints, but at any rate more thoroughly than anywhere else in the world, the German school government baffles, to some degree, the efforts of the state despotism to emasculate the minds of the people through the school. This is so much the more the case, as the influence of the state governments on the universities is not absolute.

There are two features connected with those universities since their very foundation, which counteract the illiberal purposes of the monarchical governments: the professors, ordinary and extraordinary, choose their own colleagues—subject, of course, to the approval of the monarch, which, however, is rarely withheld, and any scientific man may establish himself at the university as a professor without salary (*Privat-Docent*), and if he achieve a decided success as a teacher, and the Academical Senate (the body of professors) do not grant him a regular professorship, he may be sure to be called by some other Academical Senate to accept a place there. It is these two grand features, which the governments would fain have long ago abolished, if they dared, that German science preserves some independence as against the despotical pressure from above, and that the great body of German scientists exerts an influence on the nation, in many respects antagonistic to the political government. This influence was far more considerable before the year 1848, and this was the cause of the then prevailing excellence of the common schools. This fact seems to have been overlooked by all Americans who described the organism of the German educational system, much to the detriment of their conclusions drawn from their observation.

We can not help enlarging somewhat more upon the importance of the German university establishment. To it chiefly the nation owes its resurrection from the baneful effects of the

thirty years' war, which left it politically dead, mentally effete, and materially ruined. Immediately after that dreadful war there came a period lasting over a century, which taxed the recreative powers of the nation nearly as much as the war itself, the period in which several hundred utterly despotic governments, each administered according to the ruinous principle of Louis XIV, and most of them subventioned by him with money, in order hopelessly to split and enervate the German empire, wasted what little resources the nation contrived to develop. That Germany could ever have recovered from such unexampled inflictions, and could have become what it is, must appear like a miracle to all who neglect to trace the influence of the German universities upon the national education. We are not blind to the many faults and failings which these institutions have always exhibited; but they have nevertheless saved the German nation in the formidable long crisis mentioned. They have done it by establishing a high standard of education, by spreading it gradually over larger and larger circles of the nation, and by thus restoring in its mental power and moral character the source of material and political independence. This influence can historically be traced from decade to decade; it revived, step by step, the literature, the philosophy, the scientific efforts, the improvement of the schools, from the gymnasia, normal schools, and higher private schools down to the common schools; it created the philosophy of education and developed it into a complete system, to which the various methods of instruction and moral training were adapted. It deserves the highest praise for having finally established the great truth *that all education must be systematic;* that all the schools of a country must be a system, an organic whole, if they are to develop the full possible excellence of each grade, and really to produce true men in the highest sense of that word—and *none but such;* in a word, that the school is *necessarily monarchical* and a *centralization.*

Here perhaps your readers will stop and take breath. "How is that? A monarchical and centralized school a necessity? and here in free America?" We will explain, in a very few words, what we mean by these terms. The *idea* is to be the monarch, and the centralization is to be compatible with the highest imaginable degree of *individual freedom.* This thought, perhaps the greatest in all history, is essentially a German invention, and all the world will have to appreciate and appro-

priate it. That the Germans of the old country are at present unable to carry it through in all its ultimate consequences, and that their despotic governments falsify it in its partial execution, are not the faults of the idea. Suppose, for a moment, that the United States had a grand National University, endowed with all the material means to carry out every necessary investigation, to support every kind of study, to tolerate every kind of doctrine on an equal footing with every other, and to grant sufficient means of existence to every teacher and pupil of science and art whichsoever; suppose, as a consequence thereof, that the science and art of pedagogy, with all its auxiliary sciences and arts, were there taught by the greatest possible variety of teachers and from the most various standpoints, both practically and theoretically,—and you have the chief feature of what we call centralization in school matters. Of course the body of professors ought to be the only ones who should be allowed to choose their regular colleagues, subject, however, to the ratification of their choice through all the enrolled students of the particular branch of study. Of course also everybody should be allowed there to teach as a private professor, if he can find pupils. No political party, no religious sect, no outsiders whosoever, should be able to exert the slightest influence on the institution; and this independence will continue, if the first choice of professors is left to the existing colleges of the country.

To that National University will flock all the men and women who wish to prepare themselves for the responsible calling of professors in colleges, in normal schools, superintendents of public schools, principals and assistant principals of public schools, beside many others. They will there, for the first time in the history of this or any country, have an excellent chance to learn the science and art of pedagogy practically and theoretically, to learn it from a variety of standpoints at the hands of the best pedagogical talents of the age; and they will spread their acquirements by word and example in thousands of schools all over the country. Thus the pedagogical idea will become monarch in all the schools without impairing anybody's individual freedom. The public at large will learn more and more of the requirements of the schools for universal truly humane education, and willingly help in reforming all the schools according to the demands of the idea. Domestic education will be rapidly influenced by the growing general

insight into these demands. Family, community, and state will work hand in hand with the school. The pest of political and sectarian influences upon our schools will be paralyzed by a universal public opinion in the wake of the scientific and artistic progress fostered by the National University. The teacher's calling will be a profession followed by a growing number of the best talents and characters, because it is now very prominent before the people and likely to secure better salaries. We hope that these brief remarks on the topic presented will suffice for the present to hint at the great usefulness of a National University scheme.

As another fact in German school matters, which seems to be little appreciated by Prof. Young, must be mentioned the great degree of freedom left to German teachers as to methods of instruction and discipline. He is inclined to find in German public schools much more uniformity than there is; and as he sees in this uniformity, on the whole, a greater source of evil than of good, he is unwilling to have it imitated in our schools. Now the fact is, that the German mind is more than any other —immensely more than any other—immensely more than the American—averse to uniformity in matters of conviction, ideas, and their application. On this rock of mental independence and ideal variety the despotic form of German government must ultimately founder and be shivered to atoms. Even now this despotism with all its profuse school regulations and school inspection does not dare to insist upon uniformity of education beyond a certain point. This point is established in the standard of learning for every grade of school—and such a standard is truly indispensable anywhere, most so in the freest country. To control the how of obtaining this result by teachers, what methods, what kind of discipline, what sort of moral influence is applied by them, this would require the omnipresence of school inspectors, which luckily is not yet invented. The only effectual way to secure this uniformity—or, more properly, the abject servile spirit of the teachers which prompts them to educate their pupils into Chinese—is a uniform servile education of the teachers themselves within the normal schools. There the means is tried with ever-increasing success, at least apparently; but, as the national mind revolts at this emasculating uniformity, the progress made by the governments in this direction is indeed far less than what might be expected.

We refrain from making at this time some more remarks

which the articles of Prof. Young suggest to us; but if you, Mr. Editor, consider their communication worth the while, they will not be withheld.

Newark, N. J., January, 1874. ADOLF DOUAI

STUDYING OUT OF SCHOOL HOURS.

These remarks are intended to apply to pupils of the grammar and high-school grades.

A most common complaint against school management, especially in cities and villages, is that too many hours of mental work are required of pupils. It is assumed that the hours of school session are filled, as they should be, with close mental application, either in study or recitation. To these, it is quite customary, even as low as the lowest grammar grade, practically to require pupils to spend one or two hours more at home, and usually in the evening. Is it strange that complaint against this should be common, while the practice is so common? Whatever study is required of pupils, should consist with good health and sound progress; and study that perils either, is unreasonable.

The question, How many hours of study are best? is to be settled by an appeal to medical and household experience. In citing these two arbiters, it is not intended to exclude or disparage the judgment of others; but, as the physician is professionally competent and impartial, and the parent eminently responsible for the rearing of the pupil, their judgment, running to the same conclusion, ought certainly to be accepted by all parties less interested and less competent.

Now the question has often been submitted to medical experience and judment, and their concurrent decision is already rendered in favor of confining study to the five or six hours of school session. It is, indeed, clearly in favor of reducing these hours rather than adding to them.

Household experience confirms that of the medical profession. Indeed, the resistance of parents against the required hours of study, has led to the modern policy of shorter sessions, so far as any popular demand has called for them.

This paper is written at the request of a mother whose

daughter is broken down by overwork; and, since this writing was begun, a casual visit with two families in the neighboring city, found the parents of both protesting strongly against the evening work required of their children, declaring it ruinous and insupportable.

What is it, in our schools, that makes extra hours necessary, or seem to be so? In whose interest is this demand made, or this custom, so far as it is such, established? To the writer, it seems that two practices, mainly, lead to the demand, and in speaking of these, the parties for whose behoof it is, if there is any benefit in it, will appear.

First, the practice of long recitations is arranged—say fifty or sixty minutes, instead of thirty. A strong temptation lies before the teacher to use the longer period if he can have it. He can work more at leisure, and is likely to think he can do better work with more time.

It is not the object of this paper to advocate any particular length of recitations, but obviously, since the session is limited, the time of each exercise should be proportioned to it. The teacher should shape and limit his work before the class, so as to conform to a reasonable limit of time.

It is fair to say that, for the average scholar, the time of study is quite as essential to his sound progress, as the time of recitation. Prof. Hancock says in a recent paper:

"This exaltation of the importance of the recitation is one of the most striking changes in our educational methods. Formerly it played a very subordinate part to study; now it has become in many schools the almost all in all, study being quite crowded to one side. It might be a profitable question to consider, whether a partial return, at least, to the old landmarks might not be to the advantage of sound acquirements."

The other practice referred to, is more disastrous and less reasonable even than the first. It is a lack of discretion in the assignment of lessons, and of skill in laying out the work upon them. This error would be less observable and culpable, if truth would allow the assertion that it is confined to inexperienced teachers.

The mistake lies chiefly in assigning a tedious mass of details in such studies as grammar, history, geography, chemistry, geology, and the like, for a lesson, leaving the pupil to labor indiscriminately upon the mass, instead of indicating by a few skillfully chosen topics or questions, or both, placed before the pupil, a proper outline to be fastened on the mind.

Take the average ten pages from any book of school history, chemistry, or geology, with the usual alternation of the important and essential with the casual and trivial, and what teacher has not observed the proportion of time and labor thrown away by the average pupil in studying with equal zeal the whole mass, one-half or more of which, when acquired by dint of this misapplied labor, is the merest lumber in the mind.

The writer, in an experience of twenty-five years' teaching, is fully convinced that skill in teaching pupils of the grades here considered, lies quite as much in keeping back from their attention what is inconsequential and incident, as in putting before them in good shape what is needful and valuable.

The teacher's pride, or that of the board of education, in the extent of the curriculum, or in high percentages of scholarship, ought to give way before considerations of good health and sound acquisition. Let recitations be confined to reasonable length, so that pupils may have, at least, one-half of the school session for study. Then let lessons be assigned with greater discretion, and, if need be, let the teacher outline each, so as to indicate for the pupil the best outlay of study.

East Cleveland, O. HENRY FORD.

THE RECITATION—MISCELLANEOUS SUGGESTIONS.

Many of the suggestions in this article have often been made in this and other educational journals. But they need in substance to be often repeated for the benefit of the new class of young teachers constantly coming upon the arena, a large number of whom read this journal, and all of whom are anxious for practical suggestions. This is our excuse for grouping together here a number of practical hints which, to experienced teachers, may seem common-place.

All the machinery of school work culminates in the recitation. The teacher who fails here *fails as a teacher*, however successfully he may govern his school. A failure to teach well is more fundamental than a failure to govern well. The ability to govern well is an accessory to good teaching, not *vice versa*.

The following suggestions are general. They can be applied to recitations in any branch of study:

1. Give your whole attention, if possible, to the recitation. This is necessary in order to secure the requisite attention from the class. You can do but little if you are constantly diverted by other things in the school. During the recitation no whispering should be allowed in the schoolroom, however much it may be allowed at other times. Nor should any question be asked outside of the class. This should be insisted on. Whatever whispering or questions are necessary should be attended to between classes.

2. The teacher should stand where he can take in all the scholars at a glance without appearing to watch them. To do this he must face the school and the class, while the class sit with their backs to the school. If the class sit facing the school, or on side seats where they can look either way, their attention is quite apt to be diverted by the other scholars.

3. Usually the teacher should stand while hearing a class. It adds thirty percent, or more, to his power over the class and over the school. It gives more life to the recitation, while it enables him to see all that is going on in the room and makes him ready for any emergency. He should avoid an awkward or lazy position, such as leaning against the desk, twirling one leg around the other, putting one foot upon the chair or bench, etc.

4. The class can be called on to the floor by a little bell or by any simple signal that attracts their attention. Too much formality in calling them, should be avoided. The first stroke may call them to their feet, and the second to the recitation seats. Or, if the class is small, one stroke may answer both purposes. The thing desired is, that the class come *promptly* and *quietly* to their seats and return in the same way. They should be seated compactly, neither crowded nor too much scattered.

5. The books, unless needed at some time during the recitation, should be left behind on the desks of the pupils. If needed part of the time, they should, of course, be kept entirely closed the remainder of the time. In many recitations, the teacher's book also should be kept closed. He should have the lesson better than the best scholar in the class has it, and not be obliged to keep peering into the book to see if the right answer is given.

6. Insist on *promptness* in reciting. Much time is wasted and bad habits are formed by allowing the pupil to think a long

time before answering, and then to give the answer very slowly. It is true that some pupils are slow by nature, and others are quick. After making due allowance for such differences, an immediate answer should be required. If it is not forthcoming, pass on to the next. The pupil can form no more valuable habit than that of being able to say promptly what he knows about a given subject.

7. Insist also on *accuracy* and *clearness*. These are distinguishing traits of good scholarship, and should not be sacrificed even to promptness. If an answer, otherwise correct, is given in a bungling, ungrammatical sentence, do not pass it over, but see that it is changed and put into a correct form. If you ask for a definition, and the pupil begins his answer by saying, "It is when", or, "It is where", stop him, and show the absurdity of his answer by some such question as, "*When* is it?" "*Where* is it?" or, "Is it a time?" "Is it a place?" Definitions and important rules should be given in the very language of the book. In mathematics especially words have a very definite meaning, and should be used with strict accuracy. A clear, sharp-cut, well-formed answer in our common schools, is as beautiful as it is rare.

8. Severely discourage all attempts at *guessing* the answer. Pupils are often very shrewd at this, but they must be taught that when they come to use their knowledge in the practical affairs of life it must be known, not guessed.

9. Do not lose your patience with any amount of stupidity. You will be strongly tempted to do so. Things that appear exceedingly simple and easy to you, may be very hard and mysterious to your pupils. They can not see through them at once. One of your mottoes must be, "Line upon line, line upon line; precept upon precept, precept upon precept; here a little and there a little." Constantly recall the slow processes by which you learned what seems intuitive to you now, and then put yourself in the child's place.

10. Lose no time in giving out the lesson for the next day. Decide beforehand what it shall be, and announce it, usually, at the beginning of the recitation. Be careful to give all necessary explanations as to what is to be learned and how it is to be learned.

11. If the class, as a whole, fail on the lesson, they should be required to take it over, sometimes with a short lesson in advance. It is a waste of time, a dead loss, to pass over what is

not understood by the class as a whole. Especially is this so in those studies in which the separate truths are all linked together. It is often a wholesome thing to require the class to recite the lesson again the same day, or to stay and recite it after school.

12. If all the class but one understand a point, do not take their time in explaining it to him. Ask him to remain for that purpose after school, or to come early in the morning.

13. Close promptly when the time is up. Do this whether you are through the lesson or not. You have no right to trespass upon the time of the next class. With a clock or watch before you, you can by practice so time yourself as to go over the lesson, or the most important part of it, and close at the right moment.

Andover, Mass. R. T. Cross.

HOW SHOULD WRITING BE TAUGHT IN COMMON SCHOOLS?

This question is often asked by teachers, and having seen no answer that gives any real help, I offer a few suggestions which may be of some use to the teacher who is able to make correct letters with chalk on the blackboard.

The proper method of holding the pen should be taught first, and required with such firmness that no pupil will think of evading or disobeying the requirement. A correct method of holding the pen is of the greatest importance to those acquiring a handwriting. It embraces the position of the penholder in the hand and also the position of the hand and arm with regard to the law of movement. There is no excuse for neglecting to give proper instruction upon this subject, as correct rules are printed upon the covers of nearly every writing book used in the schools.

The next subject in order is movement in writing. Formerly the finger movement was all that was required of beginners, and it was also the principal movement used by business writers generally, but now no business writer, educated within ten years, uses it by itself. Instead of using it as primary in practice, it is combined with muscular movement as secondary. In teaching I do not refer to the finger movement as an inde-

pendent movement; but I use and teach the muscular and combined movements, and these movements are used and taught by every author and teacher of business writing in the country. As the object of our schools is to prepare the young for business pursuits, great care should be taken to teach those movements which are essential to a good business handwriting, that what is taught may be right as far as it goes.

To make the muscular movement, rest the arm on the muscle near the elbow (the fixed rest) and the hand on the ends of the nails of the third and fourth fingers (the sliding rest); then slide the bone of the arm on the tissues of the muscle which forms the fixed rest, the hand sliding on the nails. This will give the movement.

To teach the peculiarity of this movement, require the pupil to take hold of the right arm, near the elbow, with the left hand, and hold the muscle firmly and, at the same time, turn the right hand first one way and then the other, and also push it out and draw it back, thus showing that it is the bone of the arm that gives the movement. The combined movement is the harmonious action of the muscular and finger movements. The fingers are used as helps in forming the loop and capital letters.

Teaching writing in ungraded schools differs from the same exercise in graded schools in the fact that in ungraded schools there are necessarily all classes of writers, from beginners to the advanced in the same school. If the teacher is skilled at the blackboard, these different grades may be successfully taught at the same time, while giving instruction on holding the pen and movement, as they will require the same instruction, and, at first, the same drill exercise in movement. These exercises should be put upon the board, and the pupils should use loose paper. These drill exercises should represent all the various movements necessary in writing, and they should be gradually changed from the simple straight line and curve to the most complex exercises, that the class may gain command of the hand. Should the more advanced master the holding of the pen and movement sooner than the others, they may practice the drill the first half of the lesson, and use the rest of the time in practice in the copy-book. But do not be in a hurry to have pupils writing exact forms. Be sure that they hold the pen and make the movement when trying to make correct letters. This may be tested each day by giving a word

or sentence at the board, and requiring the pupils to write it, and as fast as they show the ability to do it well, give them the book. The influence of this will be good on the class.

When these points are well established and books are used, the drill exercises may be continued on loose paper a part of the time of the exercise each day; but the teacher must use his judgment as to the length of time they should be continued.

The best time for the writing exercise is just before recess in the morning or afternoon. Thirty or forty minutes will do very well; but, if this amount of time can not be had, then give the drill exercise one day and write the exact forms the next.

The free use of the pen is of first importance. The ability to write rapidly a plain hand is much more to be desired than a beautiful hand that is slow. A rapid and legible hand is all that business requires: this should be first acquired, and then beautiful writing, if time can be given to acquire it. It is very comforting to be able to write a beautiful hand. To write a plain hand at the rate of twenty to forty words a minute will require long and patient drill; therefore, *drill; drill* often and long; *drill* for free movement; *drill* for speed; *drill* for a good, rapid hand. W. W.

TAKING NOTES.

I often hear teachers lament the fact that they have not access to libraries, and, therefore, can not arrange exercises for their classes outside of the text-books used in school. Now any teacher of ordinary ability can by taking notes collect material enough, in the course of a few months, for a number of interesting class exercises. By taking notes, I do not mean a spasmodic effort in this direction, put forth once in a great while, but the habit of taking notes continually.

The teacher should always carry a note-book. When you take up a book, paper, or magazine, let this be your first question, "What can I find in this that I can use to advantage in my school?" You will find, in the course of your reading, descriptions of natural curiosities, wonderful trees and plants, strange animals, etc. Do not trust to your memory to retain all this, but note it down at the time. Improve your spare moments, and gather every item of knowledge that you can make

available in your school. I have often found interesting facts on bits of wrapping paper, leaves torn from old books, etc., and have used the same to great advantage in my school. It is astonishing what an amount of information a person can thus collect in a very short time.

When your note-book is full, what it contains can be classified. It is a good plan to have a series of blank-books, designated thus: Book No. 1.—Lessons on Plants; No. 2.—Lessons on Trees; No. 3.—Lessons on Animals; No. 4.—Lessons on Birds; No. 5.—Lessons on Fishes; No. 6.—Lessons on Minerals; No. 7.—Natural Curiosities, etc, etc. Copy into these books, in systematic order, the contents of your note-book.

In order to show more clearly the manner in which this information might be used, I will illustrate: Suppose you have a class in geography, and you wish to introduce some exercise that will hold their attention, and cause them to be glad when the hour of recitation arrives. You say to the class, "Children, I am going to give you a few lessons on trees. I shall write on the board each day the name of some wonderful tree, and give you a description of it. This description I shall expect you to remember, and give me any time that I ask for it. To-day I shall tell you about the *Cow Tree.*" So you go on and tell them where it grows, how it looks, what it yields, how the milk tastes, when it flows most freely, etc. Do not forget to ask the children to repeat the description before they take their seats. They will be quite sure to remember what you have told them, and will be very eager to learn what the next tree will be. Call on the children to give connected descriptions in their own words. Question but little; let them do most of the talking.

When your list of trees is exhausted, take plants, fishes, animals, etc., and conduct exercises in the same manner. Exercises of this kind, when properly conducted, never fail to interest a class, and I have known instances where the whole neighborhood became nearly as much interested as the pupils. Parents would inquire at night, "Well, children, what did your teacher tell you to-day that was wonderful?" The children would eagerly give the desired information, and it would form the subject of conversation for the entire evening. The children thus gained much more information, and their interest was greatly increased when they found their parents were also interested.

This requires labor, as I have said, on the part of the teacher, but, when the habit of taking notes is fully formed, it is pleasant and not tiresome work. Teachers need something to stimulate them and to keep up their interest, and the above habit has just this desired effect. Moreover, it always increases the popularity and reputation of those who follow it.

In this age of books and papers, ignorance is inexcusable in any one, and how much more so in those who presume to teach others. Teachers need to be alive, energetic, and intelligent, and they *must* be, if they hope to secure good positions, good pay, and a good name. "Let us, then, be up and doing", and seek to gain information from every source: and not only gather it, but also make a practical use of it in the schoolroom. We need much knowledge outside of the text-books used in school, and we can obtain it only by constant, untiring efforts.

Deering, Maine. ELIZA H. MORTON.

DO HENS SET?

[The following concluding paragraphs of Mr. Henkle's article were accidentally omitted last month.—ED.]

I close with a few references to show that there are others that favor the literary recognition of *set* in the sense of incubate:

On page 328, Book 2, of "An English Syntithology, in three books", 1845, by James Brown, I find not only "Hens *set*", but, "Will you *set* down?" He approves of both expressions.

On p. 225 of the *American Educational Monthly*, 1873, is a short article by that acute grammatical critic, S. W. Whitney, on "Sitting, or Setting", in which he favors the expression, "a *setting* hen."

On p. 16 of the *Normal Monthly*, Oct. 1873, is a short note in favor of "the hen *sets*."

In Cotgrave's French and English Dictionary, 1660, the French perfect participle *oeuvé*, is defined as "*set on*." It should, however, be stated that Sherwood, in the English-French part, has "To *sitt* (as a henne with egges.) *Couver*", and in the French-English part is, "Couver, *To brood, sit on*, or *cowre* over."

Salem, Ohio. W. D. HENKLE.

CORRESPONDENCE AND QUERIES.

FRIEND WHITE: I have taken a deal of satisfaction in reading Dr. Mayo's articles, in reply to President Eliot's collegiate indignation-feast at Elmira. Have wondered much that, of the large number of able men now representing our high schools, not one has deemed it his duty to come to their vindication. The fact is, these high schools, years since, became so efficient that the masses recognize the justice of the title, the *People's Colleges*, and hence the rapid demise of a considerable number of puny, half-starved, one-horse colleges in all parts of the country. The sooner quite a number more similar institutions die, the better for all parties concerned. The high school is, or should be, the stepping-stone to the state university, the crowning glory of our American system of education,—President Eliot to the contrary notwithstanding! I am sadly at fault, in estimating the intelligence and educational spirit of this country, if we ever abandon our present school system, for one more kindred to the old monastic system, howsoever harmonious may be the union between our denominational colleges and the interests that sustain them.

Rochester, Minn. C. H. ROBERTS.

MR. EDITOR: "H. C.", in the March issue of the MONTHLY, requests me to answer certain grammatical queries.

First, he wants to know why "You would better" is preferable to "You had better"? To this I answer that I consider "had better" preferable to "would better" as being well-sanctioned and idiomatic English. To state the reasons for this opinion would require a whole article, which may be, at some future time, prepared, if thought desirable.

Next he wants to know which nominative the verb should agree with in each of the following sentences:

"Either John or they have [or has] blundered."

"The first clause or the two which follow form [or forms] the subject of my discourse."

"The first two problems or the last one presents [or present] sufficient difficulty."

Goold Brown, in his Grammar of English Grammars, p 608, says:

"When a verb has nominatives of different persons or numbers, connected by *or* or *nor*, it must agree with the nearest, (unless another be the principal term,) and must be understood to the rest, in the person and number required."

According to this statement the verbs in the brackets are incorrect.

W. D. HENKLE.

MR. EDITOR: In your last issue, "L. H. W." asks the time at the mouth of the Ganges, when it is 5 o'clock P.M. on Thursday at St. Louis—difference of time being 12 hours. I answer 5:00 A.M., Friday; for when

the sun reaches the meridian of the Ganges it is 12:00 M., Thursday; when it reaches that of St. Louis it is 12:00 M., Thursday; and the time *now* at Ganges is 12:00 midnight—the beginning of Friday. Now add 5 hours to each, and the results are: St. Louis, 5:00 P.M., Thursday; Ganges, 5:00 A.M., Friday.

Suppose "L. H. W." were lifted up toward the sun so that the earth might revolve beneath him, and, beginning at Columbus, he asks the time. The answer is, 12:00 M., Thursday. If he ask at Indianapolis, St. Louis, San Francisco, etc., the answer is, 12:00 M., Thursday. But on meeting Columbus again, the answer is, 12:00 M., Friday. WHERE did the time change from *Thursday* noon to *Friday* noon? Will he or some one else please answer? JAS. H. DODD.

MR. EDITOR: In answer to the question in your last issue, in regard to the time at the mouth of the Ganges River, I would give 5 o'clock A.M., Friday. According to the usual rule, in such problems, the time is *later* as we go east; therefore, in taking an *eastwardly* direction, and adding the difference of time, the result will agree with the one given above. But, in taking a *westwardly* course, and subtracting the 12 hours, the time at the mouth of the Ganges will be 5 o'clock A.M., Thursday, which is not correct. It is known that there is an imaginary but fixed line in the Pacific, a meridian, which is called the "Day Line." It is where the day changes, and mariners in sailing westward across the Pacific drop a day in their calendar when they cross it, and, reaching the eastern shore of Asia, they find their time all right in this respect. Hence, in crossing the Pacific in a westwardly direction, one day must be dropped when the Day Line is crossed, and this, in the case under consideration, will give the time at the mouth of the Ganges to be 5 o'clock A.M., Friday.

Yours, etc., S. P. MERRILL.

MR. EDITOR: Please inform "L. H. W.", through your journal, that I give for an answer to his query, concerning the time at the mouth of the Ganges, 5 o'clock A.M., Friday.

Toledo, O., L. A. H.

MR. EDITOR: I have never introduced map-drawing into my school on account of a feeling of incompetency to give good instruction in the art. What publications will give me such instruction as will enable me to accomplish good results?

Dixon, Cal. TEACHER.

ANSWER.—There are several good works on map-drawing, including Apgar's, published by Cowperthwait & Co., Philadelphia; Allen's, by A. S. Barnes & Co., New York; Cowdery's, by M. F. Cowdery, Sandusky, O.; Ormsby's Guide, by Geo. S. Ormsby, Xenia, O.; and both the Eclectic and Guyot's Geographies contain full directions on the subject.

EDITORIAL DEPARTMENT.

—— It is believed that no other educational journal in the country is paying annually as much for contributions as this journal, and, as a consequence, we believe that no other journal fills its contributed pages with articles possessing as great practical value. We paid over $120 for one series of articles in our last volume, 1873. We are aware that this policy is not a wise one financially, for our circulation has never justified the expenditure, but we have, at least, the satisfaction of feeling that we are making an earnest endeavor to publish a journal worthy of the profession and of its liberal support. While many of our most valuable contributions are donated, we have found, by experience, that we can not rely on donated articles to fill our pages as we wish them filled. A writer who is not engaged in public-school work, and who receives liberal compensation for his contributions to the great daily papers or to the literary journals, can not be expected to write much gratuitously for educational journals, and yet these journals need the very best writing talent in the country. We have said enough, we trust, to show our readers that it costs something to publish what many leading educators are pleased to call "the best of the educational journals", and to indicate that we need and solicit their active assistance in increasing our circulation.

—— The establishment of the Anderson School of Natural History on Penikese island in the summer of 1873, was the last and crowning work of the lamented Agassiz in behalf of popular education. As early as 1850 he wrote for the *Massachusetts Teacher* an earnest article of nineteen pages on the importance of natural history as a branch of elementary education, and, that it may be well taught, he has long advocated the necessity of institutions for the special training of teachers. The gift of Penikese afforded the long coveted opportunity for the founding of such an institution, and neither the impossibility of completing the preparations for the school nor his own need of rest could induce him to postpone its opening. His reply to the importunity of others was, "I can not afford to wait a year. I must see it started." For two months he devoted his time and energies to the school. He was present at every exercise, and was the constant companion of the students in their studies. Here shone in full brightness those preëminent qualifications of the great teacher, so justly commended by our correspondent. Whether lecturing, or working with students in the laboratory, or dissecting strange fish, shells, etc., his enthusiasm was an inspiration to those present. The normal school of natural history on the lone island of Penikese will ever be a noble and fitting monument to the memory of "Louis Agassiz, Teacher."

—— A CORRESPONDENT sends us a few extracts from a sermon on the "Outlook of the Catholic Church", preached by Rev. H. S. Lake in St. James Church, New York, and published in the *Freeman's Journal and Catholic Register*, with the request that we publish them as a fair representation of the feeling of the Catholic Church towards our public schools. The gist of these extracts is, that public opinion in America not only sanctions the action of the governments of Prussia, Italy, and Switzerland against the Catholic Church, but that the Catholic religion is persecuted in America through the public schools. We quote a few sentences:

"The state is trying to force upon us a system of education which, if it be carried out, will effectually destroy the Catholic religion in this country. * * * What need has the Devil of an open, an avowed, an active persecution so long as the Catholics are forced to attend *infidel* schools? Oh! how wise is the Devil in his generation! He well knows the severest measures could never tear the faith from us. * * * Much more prudent is it to undermine the very foundation of the Church by instilling false maxims into the hearts of your little children. * * * Some of us did not at first fully realize the danger, * * * but now all good Catholics know the danger of the Devil's pauper schools. * * * In America the Public Schools are doing Bismark's and the Devil's work, and doing it effectually. * * * We are losing a large majority of our young men. * * * The apostates in this country are counted already by the million. * * * Let Catholics continue to send their children to Public Schools, and the end of the century will find our churches deserted."

Comment on these utterances is unnecessary. Suffice it to say that many good Catholics will not accept them as the expression of their attitude toward public schools. If the Catholic Church is losing, as is alleged, "a large majority of its young men", the apostasy can not be wholly due to the influence of the schools. The Nineteenth Century must share the blame. But when a religious teacher states that "Catholics are forced to attend *infidel* schools" in this country, we discount all his statements, not supported by evidence.

—— A "DIRECTOR" in one of the growing cities of Eastern Pennsylvania seriously advocates the doctrine in a local paper, that teachers in primary schools not only do not need a thorough knowledge of reading, writing, arithmetic, geography, and grammar, but that a teacher who has devoted the necessary time and labor to acquire such a thorough knowledge, has become disqualified for teaching the rudiments to small children! He further adds that the employing of only such primary teachers as have a thorough knowledge "of even the branches they teach—reading, writing, and arithmetic"—would not only be unnecessarily expensive, but would also be unprofitable as a means of securing efficient teachers. The fact that this "Director" expresses the views of the great majority of those who have the official direction of our common schools, is the sad explanation of the unsatisfactory condition of primary education in this country. "A girl of sixteen years, fresh from the grammar schools", may succeed in hearing lessons recited by rote and in keeping children quiet, and she may thus satisfy her employers, but such young girls can not, as a class, *teach* even the rudiments of "reading, writing, and arithmetic"—certainly a very limited course of primary instruction. We have visited hundreds of primary and secondary schools in charge of girls who had not a thorough knowledge of the

branches they were trying to teach, but, with rare exceptions, they were not accurate and skillful *teachers*. Most of them were evidently ignorant of the first principles of primary instruction. As a rule, no girl of sixteen ought to be employed as a teacher, whatever may be her scholastic attainments.

——The filling of a few lecture engagements in the East recently gave us an opportunity of spending a day in Washington City and visiting the National Bureau of Education. Commissioner Eaton placed us under many obligations by showing us the details of the work of the office and explaining his plans for the future. We here saw the practical embodiment of what we deemed both feasible and desirable when, on behalf of the National Superintendents' Association, we drafted the memorial to Congress, and also the bill creating the Bureau, which, with some modification, was finally passed, and is now the law under which the office is managed. The section of the law defining the duties of the Commissioner is precisely as we wrote it, and it affords us special gratification to add that the usefulness of the office is demonstrating its wisdom. Some have regretted the fact that the Commissioner has no authority over the school systems of the states, but we regard this a most important feature. The only authority the Bureau of Education needs is the weight of its facts, arguments, and suggestions. It has taken much longer than was anticipated to obtain anything like complete statistics of the educational work of the country, and the tables even now compiled are provokingly imperfect—a fact realized by no one so fully as by the Commissioner. But each year shows a marked improvement, and there is good promise that satisfactory results will soon be reached. We were specially interested in the large collection of foreign educational documents, including reports showing the condition and progress of education in nearly every important nation on the globe. It is earnestly hoped that Congress will give this Bureau every needed facility for the accomplishment of its great work. It is the central educational battery of the country, and its influence already reaches every section and community.

——We have received a copy of a brief but able report on compulsory education submitted to the New York City Council of Political Reform by Dexter A. Hawkins, Esq., chairman of a committee on the subject, and approved by the council. The argument is based on the propositions that *universal education is essential to free government;* that *education decreases pauperism and crime*, and *increases the value of the citizen*. These propositions being established, the American doctrine is reached that "*the property of the state should educate the children of the state*", and, to this end, the state should require *all children to attend school during the school age and the school terms*, unless legally and for good and sufficient reasons temporarily excused. This last proposition, embodied in a resolution, was adopted by the council. Mr. Hawkins shows in a few sentences and by a few statistics that crime is largely the consequence of

ignorance, and that universal education tends to universal morality. His review of the parochial systems of Italy, Spain, England, and Ireland clearly shows that they are attended by a fearful array of illiteracy, pauperism, and crime; and that free public schools must be relied upon for the education of the people.

—— MATILDA FLETCHER solicits the hearty approval and coöperation of teachers and school officers in establishing an industrial exhibition in every ward and district school in the country, before the Centennial. She proposes that one day each week be set apart for the purpose, and that the pupils be required to bring to the schoolroom some useful article, made by their own hands, to be exhibited and explained, under the supervision of the teacher, in the presence of the parents and friends—these articles to consist of specimens of cooking and sewing of all kinds, or anything else common to household work; iron and wood work of all kinds, from a plain box or horse shoe to a steam engine or house in miniature; and all other useful things known to the children, or that may be invented by them; also, farm and garden products, in their season, with explanations of process of culture, kind, value, etc. The suggestion is said to have the approval of Commissioner Eaton and many other eminent educators. We think that a quarterly or semi-annual exhibition of the kind proposed would be feasible and profitable, but we question the propriety of having such an exhibition weekly.

—— WE are not surprised to learn that there is no truth in the statement, to which reference was made in our February issue, that the nonuse of the rod in the Chicago schools has increased the number of suspensions. The fact is, that there are less suspensions now than there were when corporal punisment was in vogue. While the average number of pupils in daily attendance has increased 5,000, or nearly 20 per cent, in one year, the number of suspensions is less than 50 per cent of the number of the preceding year. It is now over two years since the adoption of the motto, "*Corporal punishment permitted, but not practiced*", and, with the exception of the unfortunate case of punishment last fall, the experiment has suffered no serious backset. The teachers have not only given up the use of corporal punishment, but, at a recent meeting of the principals, it was voted to discontinue the practice of detaining pupils after school for disciplinary purposes—a practice not common in the schools, but it is determined to dispense with it entirely. The Chicago teachers have undertaken a great and noble work, and they have the best wishes of all who desire to see a reform in the discipline of American schools.

—— "A TEACHER" sends us a communication on "The Teacher Question", in which he asserts that the *natural* qualifications of teachers, physical, mental, and moral, may be known by their physical features, the shape of the head, the expression of the eye, and the temperament,

and hence he advocates that applicants for a teacher's certificate should pass "under a scrutinizing examination of a thorough *phrenologist* or *physiognomist*"! He thinks that such a requirement would do more to elevate the character of teachers than normal schools, teachers' institutes, and all other agencies now employed for this purpose. We think we see one little difficulty. There are too few "thorough" phrenologists and physiognomists for the work, and, if this be not the case, we do not know who would be competent to select and appoint them. Whatever may be true of phrenology, most of the professional phrenologists, of whom we have any knowledge, are first-class humbugs. We would not trust one of them to select a hostler for our horse, much less a teacher for our children.

—— ANOTHER correspondent (W. R. M.) suggests as a means of increasing the scholastic qualifications of teachers, that county examiners hold semi-monthly meetings for the instruction of teachers, and that all teachers not holding a state or first class city certificate *be required* to attend these meetings; that certificates be issued quarterly, and that one branch be added at each renewal. He thinks that this plan would afford teachers the assistance and encouragement which they need in order to study with success, and that it would result in their regular and continued improvement. We judge that our correspondent has neither counted the *cost* of these monthly meetings to the great majority of the teachers in every county, nor estimated the actual benefit which many would receive. He certainly has not duly considered the injustice of requiring all teachers, with the exceptions named, to attend such meetings. Too many of the plans suggested for the improvement of our schools, seem to ignore the fact that teachers have rights which the public is bound to respect. The public has the right to demand that teachers shall possess certain qualifications, but it has no right to prescribe the manner in which these qualifications shall be acquired. It is true that the majority of teachers need not only the incentive of recurring examinations to induce them to study, but that they also need instruction and counsel. This assistance can usually be obtained near their home; at all events, they should not be compelled to go monthly to the county examiners for it.

—— DR. NORTHROP'S recent work, "Education Abroad", contains an admirable letter from Rev. Dr. J. P. Thomson, of New York, now at Berlin, contrasting the German and American systems of higher education. The distinctive features of German education specified are minuteness and accuracy of detail in the foundations of every study, and patience and thoroughness of investigation in the pursuit of special branches, with a consequent narrowness. Its tendency, as stated by a German professor, is "always to *Wenigkeit*—a searching for some little thing." He thinks that the American system excels in the discipline of the reasoning powers and in that exercise in "the logic of common sense", which is the very essence of American training. He states that an eminent

German professor recently lamented the narrowness of German education, and said that he should educate his son more after the English method. Another German professor deplored the waste of time in idleness, gaming, etc., in the universities, owing to the fact that attendance upon lectures is made voluntary at too early an age. "We need", he said, "your *obligatory* method for our young men." Dr. Douai's able paper in this number shows that intelligent Germans are not fully satisfied with the German elementary schools. We suspect that no educational system has yet approached so near perfection that it can not be improved.

—— The "banner" plan of securing regular attendance is very effective in Springfield, O. There is a banner room for each grade and also one for the city. The banner school for the city in February, enrolling 39 pupils, had 36 pupils who were neither absent nor tardy. In the Western district, with an enrollment of 453 pupils, there were only 13 cases of tardiness in the month, and of the 1,700 pupils enrolled in all the schools, 950 were neither absent nor tardy—certainly an excellent result. The plan is also very successful in the schools of Lima, O. The schools are divided into three divisions, viz: (1) high and grammar, (2) intermediate, and (3) primary. The school in each division that stands highest in punctuality and attendance has the banner, which is placed over the door outside, for one week. The schools in possession of the banner when the report was made to us, had reached respectively the following per cents: high school, 99⅔; intermediate, 97; primary, 95.—— The public schools of Lancaster, O., use a monthly "Roll of Honor", with three grades as an incentive to regular and prompt attendance. The first grade includes those pupils who have been neither absent nor tardy; the second grade, those who have not been absent and who have been tardy but *once;* and the third grade, those who have been absent but *one-half* day and not tardy. The school having the highest per cent of its pupils neither absent nor tardy for any month, is the "Banner School." Of the 967 pupils enrolled in 1873, *forty-two* were neither absent nor tardy during the year.

—— We stated in our January number that the manual labor experiment has often been tried in this country, and uniformly without success; that the only condition on which it can succeed, is the requirement of labor of all the students, with a corresponding reduction of the time usually allotted to study. A correspondent, who is connected with an agricultural college that proposes to try the experiment, writes that he fears that we are right; that in the agricultural colleges of Michigan, Illinois, and Iowa, where the plan seems to be succeeding, all the students work, while at Cornell, where it has failed, only a small number of students attempted manual labor. We shall be very glad to receive reports of progress from any institution that is trying the manual labor system. The facts of actual experience are worth much more than opinions or theories.

THE STUDY QUESTION.

Most of the cases of over-study which have come to our knowledge within a few years, especially in public schools, have been by girls, and we believe that more girls than boys injure their health by excessive application. There are two sufficient reasons for this result. The incentives used in the schools to secure high scholarship, stimulate girls, as a class, more than boys, and the other fact is given by Dr. Clarke in his recent work on "Sex in Education"—a fact which applies in full force to three-fourths of the girls in our upper grammar and high schools.

There are other circumstances which cause the study requirements of these schools to affect girls more than boys. Girls have less outdoor exercise, and both society and fashion are permitted to lay extra burdens on them. As a general rule, they are allowed to go into society much earlier than boys, and this fact alone is the source of much mischief. Few girls can go into society, attending one or two parties a week, receiving company, etc., and also meet the study demands of most of our high schools. As it is impossible for the schools to keep their pupils out of society, or otherwise regulate their home life, we have come to the conclusion that *no study out of school hours can safely be required of girls.* Between the schools and society, the health of many girls is sacrificed.

Moreover, as a matter of fact, the girls in our public schools are studying more hours than the boys, a statement fully sustained by the testimony of parents. The fact that girls, as a class, are standing higher in their studies than boys is unquestionably the result of greater application. In a recent article on this subject, Col. Higginson gives the case of a young girl whose health has been ruined by studying far into the night, sometimes as late as 2 o'clock, to prepare the lessons assigned her in a high school. While this exceptional case is more than matched by the sad story of little David White, who recently hung himself in a fit of despondency, caused by the fearful pressure to which he was subjected in a New York school, we are confident that comparatively few boys in our upper schools suffer from excessive study. We are certainly safe in saying that a majority of our high-school boys can, without injury, study daily one to two hours out of school for five days each week, especially when the daily school session is only five hours. We are aware that most of these boys are growing rapidly, and that they have neither the physical nor the mental endurance of men. It would certainly be wrong to require of them as many hours of study as may be safely undertaken by adult students in colleges and universities. They need more physical exercise, more recreation, and more sleep. If the evenings of the boys in our cities and towns were generally spent in home sports, free from corrupting influences and associations, we should be glad to see them entirely excused from evening study. But it is far better for a boy to spend his evenings over his books than to spend them in the streets. If, however, a boy's evenings are devoted to study, he should neither be required nor permitted to study out of school in the day time. The

health of pupils is quite as often injured by studying in a hurried and nervous manner during the noon and other recesses of the day as by studying at night, and the anxiety and mental strain arising from half prepared lessons, are doubtless more injurious, in many cases, than the effort put forth in study. The manner and conditions of study injure health more frequently than the *amount* of study.

If our schools were in session six days each week, the requiring of any home study would be too severe for the great majority even of boys. Six hours of mental effort, even when relieved by changes of work and brief intervals of rest, are a good day's work for the average man, and though in our grammar and high schools nearly one-half of each day's session is devoted to exercises and recesses affording a degree of mental and bodily relief, the six hours of confinement and study sufficiently tax growing youth. The Saturday's holiday may be an offset to some home study the other five days of the week.

Taking all things into consideration, and especially the necessity of protecting too ambitious girls from excessive application, we are inclined to agree with our correspondent that *no study out of school hours should be required of pupils in public schools.* This statement is also warranted by the undue pressure to which the pupils in our schools are often subjected to cause them to reach high percentages in their examinations. Teachers are too strongly tempted to neglect the health of their pupils to secure the commendation which the school authorities and the public award to brilliant examinations. This examination pressure usually affects those pupils most who have the least physical vigor to endure it.

But we do not wish to give countenance to the idea that study is of itself injurious to health. We believe, on the contrary, that well-directed, vigorous study is conducive to health and longevity. The duration of life among scholars and literary men, notwithstanding their neglect of out-door exercise, is greater than among those who are not addicted to brain-work. Cheerful and earnest study gives tone to the nervous system and vigor to all the vital powers. Indeed, it stands to reason that as the body was made for the soul, the development of the latter by study and thought need not injuriously tax the vital functions of the latter. There is, of course, a natural limit to the amount of mental effort which can be safely undertaken.

This study reform must go farther than the limitation of the amount of study. Its character and conditions must also be considered. The study required of children must be adapted to their mental capacity, as well as to their physical development. It must neither cram their memories with to them incomprehensible abstractions and generalizations, nor overtax their growing bodies by too long confinement. It must reduce the fret and worry of school life and increase its cheerfulness. Vigorous study and spirited recitations must alternate with physical exercises and recreations. In short, the reform needed must conform the school life of children both to the laws of hygiene and the laws of mental development. When this is wisely done, the evils of over-study will largely disappear.

We would also give no support to the charge that the schools are

chiefly responsible for the physical degeneracy which is just now so much lamented—a result largely due to causes which lie outside of our schoolrooms. Society and fashion do more mischief, in this direction, than over-study, and no amount of sanitary discipline in the schools, can be made a panacea for a want of physical exercise out of school hours, for unwholesome food, late hours, unventilated sleeping rooms, insufficient clothing, excessive reading of emotional novels, and unhealthy parents. But let us see to it that *the schools do not aggravate the effects of these evils.*

EDUCATIONAL INTELLIGENCE.

—— When notified that a subscriber has failed to receive any number of this journal due him, we always remail it. New subscriptions may begin with the January or April number.

—— The friends of this journal are requested to send us *marked* copies of all local papers containing school news or articles on education. We wish to make this department as full as possible, and, to this end, we must be supplied with the necessary intelligence.

—— The "Jubilee Singers" have already sent home from England $35,000, and they expect to increase this amount to $50,000 by the first of April. When they return to this country, we hope they may give a series of concerts for their own benefit.

—— We are indebted to Mr. Senter, of the School Commissioner's office, for this simple method of removing ordinary scratches from a slate: Dip a wet sponge or cloth into pulverized pumice stone and rub it over the surface of the slate. It will soon be as smooth as the surface of a new slate.

—— If the editor of the *Maine Journal of Education* will compare the contribution on "Class Management" in his March issue with the editorial on "Methods of Conducting Recitations" in the July number of this journal, 1873, he will discover that the former is but an outline of the latter, and that his correspondent (A. L. H.) has failed to give due credit for his ideas, or even to use quotation marks when he copies our language.

—— Mrs. Ogden has removed her Kindergarten to 31 North Fifth Street, where it has much improved accommodations. The Spring term will begin April 13th, and from twelve to fifteen children will be received. The second Kindergarten Training Class will be organized April 13th, and the course will extend through five months. The first class was composed of three young ladies, representing Minnesota, Wisconsin, and Ontario. Persons wishing further information should address Mrs. John Ogden, Columbus, Ohio.

—— THE spring term of the Ohio Central Normal School at Worthington has opened encouragingly. From twelve to fifteen students will graduate in June—a fine class. The summer Normal Institute will open July 7th, and continue five weeks.——Institute committees wishing to employ a competent teacher of reading and elocution, will do well to apply to Mrs. M. Josephine Warren, of Philadelphia. She is an accomplished elocutionist and a good institute instructor.

—— MR. C. FORNEY, principal of one of the ward schools of Pittsburg, has adopted the plan of having the writing and drawing in all his rooms taught by one teacher, and the experiment has been very successful.——County Supt. Fee, of Washington County, Pa., recently received a gift of $61 from his friends in Cannonsburg.——C. S. Bragg, Esq., of the firm of Wilson, Hinkle & Co., Cincinnati, has presented another installment of $800 worth of books, on his subscription of $5,000 to the library of Wooster University, O.

—— THE board of education of San Francisco has limited the teaching of French and German in the public schools to the six upper grades.—— The board of education of Omaha, Neb., has passed a rule forbidding school exhibitions.——Mr. Elias Colbert recently repeated the Foucault pendulum experiment in the Exposition Building, Chicago, thus demonstrating anew the fact that "the world moves."——The Educational Association of Virginia decided at its recent meeting that ladies can not become members—the Nineteenth Century to the contrary notwithstanding!

—— SUPT. FURNESS, of Tiffin, O., has adopted a very efficient plan to secure necessary attention to the *meaning* of the pieces read. He prepares series of questions on the reading lessons, questions relating to the meaning of words, phrases, and passages, and to other facts essential to a clear understanding of what is read. Good results are thus secured. ——No spelling books are used in the public schools of Springfield, O. Words for each grade are selected by the superintendent, and arranged in topical form, words of kindred meaning being classed together. The words are written by the pupils in blank books, and they are required to *use* each word in a complete sentence.

—— COLLINSVILLE, Mo., has an elegant school building, and the schools are in a prosperous condition. It is the aim of the principal, Mr. John A. Young, to keep them at least equal to the schools of St. Louis.—— Omaha, Neb., has one of the largest and finest school buildings in the country, and *The High School* is one of the best school papers published. ——Napoleon, O., has a school building heated and ventilated in a satisfactory manner. The means of ventilation are so efficient that the entire atmosphere of any of the rooms can be changed, if necessary, in fifteen minutes.

—— THE Boston Normal Art School has proved an eminent success. It is now attended by about one hundred students, and numerous appli-

cations from other states are refused for want of accommodations. There are four departments—elementary, painting, sculpture, and architecture, —and the complete course requires four years. *Harper's Weekly* also gives Boston credit for a free drawing school, with nearly two hundred students; a school devoted to instrumental drawing, designed for the mechanical classes, and regularly attended by about two hundred and fifty persons; and also the drawing schools of the Lowell Institute, which are in a flourishing condition.

—— THE graded schools of St. Charles, Minn., Mr. J. R. Richards, principal, had a fine record of improvement in school attendance in 1873. Three years ago the average per cent of attendance was 90, and a single month reported 374 cases of tardiness. The per cent of attendance last year averaged 97, with an average monthly tardiness in all departments of 5⅔ cases. In the high school there has been only one minute of tardiness for the entire year,and this case was by a strange pupil who did not know that "so much fuss would be made over a minute." This result has secured by mild measures and "*picture* suasion." The pupils feel that it is a disgrace to be late. Mr. Richards wishes to hear from the school of 300 pupils that has a better record.

WILMINGTON, DEL.—If the interest of teachers in professional instruction, may be accepted as an indication of their interest in their work and its improvement, this city has an earnest and progressive corps of teachers. We recently had an opportunity of addressing them on professional topics, and seldom have we had more appreciative hearers. This visit also gave us an opportunity of learning something of the character of the schools, their classification and gradation, course of instruction, etc. We were pleased to learn that the classes in the high school are separated by an interval of five months, instead of one year, and that the pupils are so promoted as to give the great majority the opportunity of doing thorough work. What we learned of this school gave us a very favorable opinion of its efficiency. The course of instruction in the primary schools is carefully arranged. It gives due prominence to oral instruction, including object lessons, science lessons, language lessons, etc. We learned at Wilmington that but little progress has as yet been made in public education in Delaware, outside of the cities. It is hoped that the excellent schools of Wilmington may soon be supplemented by a good system for the entire state.

GEORGIA.—School Commissioner Orr makes an earnest and able argument for public education, in his official report for 1873. He shows the great need of an efficient school system in Georgia, and contrasts the cost and value of such a system with a system of private schools and with the old plan of "poor" or pauper schools. He earnestly recommends that the power of local taxation for school purposes, with proper safeguards, be conferred on county boards of education—a wise recommendation.

MACON, GA.—*Mr. Editor*—In compliance with your request I furnish a few facts concerning our schools in Macon. The effort to establish public schools in this city and county was undertaken a little more than a year ago, under a special act of the Legislature, incorporating the "Board of Public Education for Bibb County." Schools were established in various parts of the county and also in the city, but as the appropriation for school purposes was very small everything was done on a *cheap* scale. In the city, rooms in church basements or wherever else they could be obtained *without cost* were occupied, and teachers on low salaries were appointed and set to work. Inaugurated under such auspices and with an entire misapprehension, on the part of the people, of the nature and object of the system, it was not surprising that the schools were regarded as institutions of charity, and patronized almost exclusively by the indigent. Such was the condition of things, when in the latter part of the year I became identified with the schools as superintendent. To reverse this order at that time was impossible, and the schools were continued with very little change till the close of the year in June.

During the summer months the friends of the cause set themselves earnestly to work to remove misapprehension and prejudice, and to reorganize the schools and place them upon a better footing. Better salaries were offered, rooms better adapted to our purposes were rented, and the first of October found us with three well-organized grammar schools and a high school, connecting our system with our two colleges, Mercer University and Wesleyan Female College. The schools rapidly grew in favor with the people, and now, at the expiration of five months from their inauguration, they are universally admitted to be the best schools in the city. They are emphatically the schools of the people and are patronized by our best citizens. Before the expiration of the present school year, one of our grammar schools will be transferred to a fine large brick schoolhouse with eight class rooms and a large assembly hall, with all modern conveniences, now in course of erection. This building will doubtless soon be followed by a second.

At the last meeting of our board a plan was set on foot to secure a certain number of free scholarships in our colleges, to be awarded to meritorious graduates from our high school. Should we be successful in securing such a privilege, and I have good reason to believe we will, I have no hesitancy in saying that the educational advantages of Macon will be unequalled by those of any city in the Southern States.

We have had good schools for the colored children from the beginning. The American Missionary Society very generously placed at the disposal of the board their large "Lewis" schoolhouse on the single condition that the society be allowed to nominate half the teachers employed in the school. We accommodate four hundred and fifty children in this building. I must not omit to mention that in our time of greatest need we received a liberal appropriation from the Peabody Fund through that eminently wise and good man, Dr. Sears. May he live long to help onward the cause of universal education. Z.

OHIO.—The press of the State has entered an emphatic and almost unanimous protest against the ridiculous McCoy School-Book Bill,—a scheme to throw out of the schools more than a million dollars' worth of acceptable books, and adopt for ten years a set of worthless books, to be prepared by a few schemers who wish a small job! Mr. Case's bill, giving boards of education authority to purchase books and sell them without profit to pupils, has passed the House.

FREMONT.—We learn from the manual of the public schools that the course of study below the high school covers a period of eight years, and includes three terms of United States history in addition to the common branches. Drawing and music are taught in all grades. Elementary physics is taught orally the last two years of the grammar-school course. The high-school course covers four years and includes a course with three English studies each term, a second course with two English studies and Latin each term, and a third course with three English studies and Latin. Pupils take any one of these three courses. Supt. Ross's report gives a full and satisfactory exhibit of the condition and practical work of the schools. It shows an enrollment of 1,050 (about 60 per cent of the school population), an average monthly enrollment of 808, an average weekly enrollment of 722, and an average attendance of 643. The enrollment within five years has been as high as 71 per cent of the school enumeration, but the gradual withdrawal of Catholic pupils has caused a decrease in the comparative enrollment. Attention is called to the fact that the city in Ohio which enrolls the smallest per cent of its youth of school age, has the highest per cent of daily attendance, while the town having the largest comparative enrollment, has the smallest per cent of daily attendance.

MT. UNION COLLEGE.—The reported income of this institution last year was $25,650; the number of students in the eight regular departments, 1,215; the whole number of graduates since the organization in 1846, with degrees, 428, and in the normal course, 4,268. It is stated that nearly two-thirds of the 15,000 students, past and present, have taught school. Among the advantages claimed for the institution are a large faculty of sixteen professors, several elective and special courses of study, and an unusually large museum, cabinet, and apparatus for illustrative teaching, while the low charges for tuition and the facilities for cheap boarding make the expenses of students comparatively light. The terms are so arranged as to give students the opportunity of teaching in the winter season, and a special winter term accommodates those who do not teach. The next term begins May 12th.

NATIONAL NORMAL SCHOOL.—This institution reports an enrollment of 1,613 different pupils last year, with an average term enrollment of 520. The number of regular teachers was 13, with 5 teachers of special branches. The school year is divided into four terms of eleven weeks each, and a normal institute of six weeks, beginning this year July 7th. Students can enter at any time and study what they please, when they please, as they please, and as long as they please. Their attendance

upon recitations and the other exercises of the school is optional, and they are not subjected to examinations of any kind to test their proficiency. It is taken for granted that all do faithful work, resulting in a mastery of what is attempted.

BOOK NOTICES.

ESSAYS ON EDUCATIONAL REFORMERS. By ROBERT HERBERT QUICK, M.A., Trinity College, Cambridge. 12mo. $2.00. Cincinnati: Robert Clarke & Co. 1874.

It is the aim of this work to put within easy reach of English readers a knowledge of the views and labors of those great Educational Reformers who are the sources of our moden methods of teaching. Beginning with the schools of the Jesuits, which made the Latin language, theology, and the arts of speaking and writing the chief elements of their *Ratio Studiorum*, it discloses the long pathway by which a more natural system has been reached—a system in which *things* are made as important objects of study as *words*. The great reformers selected as representatives, are Ascham, Montaigne, Ratish, Milton, Comenius, Locke, Rousseau, Basedow, Pestalozzi, Jacatot, and Herbert Spencer. The life, labors, and more characteristic principles of each are briefly sketched, and, what adds much value to the work, these principles are given in the language of the reformers, though usually in brief extracts. These sketches are interspersed and supplemented by the criticisms, commendations, and other comments of the author. In most cases, these comments show good judgment and a thorough knowledge of the subject, but we think that they occupy too much of the space. Indeed, Mr. Quick puts himself among the reformers by devoting several chapters to his own "Thoughts and Suggestions" on a variety of topics. While we find these thoughts and suggestions very valuable, we should be better pleased with the book, if it were wholly devoted to what its title promises. We also question the propriety of devoting so much space to Herbert Spencer—a living writer whose work on education is widely circulated, at least in America. Several of the sketches are quite meagre—a fact certainly not due to any lack of appropriate material. Sketches of Fenelon, Frœbel, and one or two other famous reformers, would have added to the historical value of the work.

But we have no desire to indulge in criticism. The work is one of the most valuable contributions yet made to pedagogical literature in English, and it will be welcomed by hundreds of thinking teachers who desire to know what the great educational writers of the past have said on the subjects now under vigorous discussion. It will doubtless surprise many to find that certain ideas and methods called *new* are as old as Montaigne and Comenius. All interested in the improvement of methods of elementary teaching, will find this book a rich mine of information. Its republication in this country, in so handsome style, will, we trust, be duly appreciated by the profession. The work should have a large sale.

LANGUAGE LESSONS: An Introductory Garmmar and Composition for Primary and Intermediate Grades. By WILLIAM SWINTON, A.M., Author of "Progressive Grammar", "School Composition", etc. New York: Harper & Brothers.

It is now nearly ten years since we first published the outline of a series of lessons in English grammar, embodying the principles which form the basis of this new introductory grammar. We have therefore examined the work with a prepossession in its favor, and with a desire to find it worthy of unqualified commendation. It is, we think, a great improvement on the ordinary introductory grammars, inasmuch as it makes more systematic and constant use of synthesis or composition, and less of formal parsing, but it seems to us that the author has made a mistake in announcing in the title that the work is designed "for primary and intermediate grades." It contains too much technical grammar for so young pupils, even though this grammar is generally made a means to composition as an end. We agree with Herbert Spencer that the teaching of technical grammar to children is an "intensely stupid custom", and this is true whether it be taught under the name of "primary" grammar, as formerly, or under the new name of "language lessons." Composition should certainly be taught in primary and intermediate schools, but there is no necessity of making technical grammar the basis of composition. "As grammar was made after language", says Spencer, "so ought it to be taught after language."

The above remarks are not offered as a criticism on Prof. Swinton's book, but they indicate that it is not adapted to pupils below the upper classes in the grammar-school grade. In using the book in these classes, we should make grammar the end and composition the means, thus teaching grammar through composition, and not composition through grammar. We heartily commend the work to the attention of all progressive teachers.

BLANCHARD'S SECTIONAL MAP OF ILLINOIS. For Schools, Offices, and Families. Size 36 by 44 inches. Price, full mounted, $5.00. Published by John H. Rolfe, Chicago, Ill.

We congratulate the teachers of Illinois on the publication of a wall map which will enable them to teach the geography of their state with satisfactory success, and we hope that this may may not only find a place in every school in Illinois, but that it may be faithfully used. It is surprising how little teachers as a class know of the geography of their own state. We have in our possession the maps of Ohio recently drawn by a class of over fifty applicants for a teacher's certificate in one of the largest cities of the state. They are a striking evidence of the sad neglect of home geography in our schools. We believe that our pupils, as a class, have a better knowledge of the geography of England than of Ohio. The absence of a manual or map to aid in teaching home geography is doubtless one reason of its neglect, and hence we rejoice in the removal of this obstacle in Illinois and a few other states. Mr. Blanchard's map not only presents the counties and townships, railroads, etc., of Illinois, but the margin contains four smaller maps, two representing respectively the geology of the state and the altitude of its surface, and

the other two being political maps. The first two maps have curves representing the temperature and rain-fall, prepared by Elias Colbert, who has made these subjects a special study. The margin also contains concise descriptions of the land surveys, geology, mineral resources, topography, etc., with tables of population, altitudes, etc. It is thus made a manual of information as well as a beautiful and useful map.

KINDERGARTEN CULTURE IN THE FAMILY AND KINDERGARTEN; A Complete Sketch of Froebel's System of Early Education, adapted to American Institutions. For the use of Mothers and Teachers. By W. N. HAILMAN, A. M. With 12 Plates. Cincinnati and New York: Wilson, Hinkle & Co.

The character of this little manual is indicated by its title. The first chapter discusses the aims of the Kindergarten system, and the second presents its proximate ends and methods. This is followed by four chapters, presenting six "gifts" for Kindergarten training in the family, a chapter on the development of ideas by means of tablets, sticks, and peas, and another on drawing. The next three chapters are devoted chiefly to the Kindergarten proper, and the book closes with a chapter on the adaptation of Kindergarten culture to American institutions and the mode of its introduction. We are not sufficiently familiar with the subject to express an intelligent opinion of the merits of the work, but we judge that it will prove a helpful guide to inexperienced Kindergartners. The plates are excellent.

THE PHILOSOPHY OF EDUCATION; or "Pedagogics as a System." By Dr. KARL ROSENKRANZ, Professor of Philosophy in the University of Konigsberg. Translated from the German by Anna C. Brackett. St. Louis: Gray, Baker & Co.

We have found this volume very slow reading, owing, probably, to our want of familiarity with the system of German philosophy on which it is based. It is the philosophy of Hegel "boiled down," and we fear that there are few teachers who will not be obliged to pass over many passages without mastering them. We have been obliged to leave quite a number "to think about." The work is a comprehensive analysis of pedagogics as a science, and the sub-divisions of the subject are treated with great brevity and conciseness. The *student* of education will find the work one of great interest and value, but it can not be well read as a pastime. The historical portions and the discussions of particular methods and systems are specially valuable.

——SCRIBNER'S MONTHLY announces a new serial story by M. Jules Verne, entitled "The Mysterious Island," now appearing in the "*Magazin D'Education et de Recreation.*" It will be begun in the April number, and continued throughout the year. The story shows how a body of men thrown helpless upon a desert island, may develop a living from purely scientific resources, without any convenient wreck to draw upon for the materials of life and comfort.

——THE *New York School Journal* (N. Y. City) is, with a single recent exception, the only *weekly* educational journal published. It is well ed-

ited, contains a full resumé of educational and scientific news of interest, and is furnished at the very low rate of $1.50 per annum, postage included.

NEW BOOKS RECEIVED.

WORCESTER'S COMPREHENSIVE DICTIONARY. Revised Edition. Boston: Brewer & Tileston. Price, $1.80.

WORCESTER'S PRIMARY DICTIONARY. Revised Edition. Boston: Brewer & Tileston. Price, 62 cts.

WORCESTER'S POCKET DICTIONARY. Boston: Brewer & Tileston.

MAURY'S PHYSICAL GEOGRAPHY. By M. F. Maury, LL.D. New York and Baltimore: University Publishing Co.

BOTANY FOR YOUNG PEOPLE: How Plants Behave. By Asa Gray. New York and Chicago: Ivison, Blakeman, Taylor & Co. Price, 75 cts.

A PRACTICAL COURSE WITH THE FRENCH LANGUAGE. On Woodbury's Plan with the German. By Louis A. Lauguellier, LL.D., and H. M. Monsanto, A.M. New York and Chicago: Ivison, Blakeman, Taylor & Co.

OLD-TIME PICTURES AND SHEAVES OF RHYME. By Benjamin F. Taylor, Author of "January and June", etc. Second Edition. Chicago: S. C. Griggs & Co. Price, $1.75.

A NEW DISCUSSION OF THE TRINITY. By Rev. F. H. Burris. Chicago: S. C. Griggs & Co. Price, $1.50.

THE BIRDS OF NORTH AMERICA: Drawn from Life, and uniformly reduced to One-Quarter their Natural Size. By Theodore Jasper, A.M., M.D. Jacob H. Studer, Publisher, Columbus, O. Parts I, II, III, IV, V. Price per Part, $1.00.

SCHOOL REPORTS.

Fifth Annual Report of the Public Schools of Pittsburgh, Pa. George J. Lucky, Supt.

Annual Report of the Public Schools of New Haven, Ct. A. Parish, Supt.

Forty-fifth Annual Report of the Public Schools of Baltimore, Md. Wm. R. Creery, Supt.

Sixth Annual Report of the Public Schools of Utica, N. Y. Andrew McMillan, Supt.

Annual Report of Worcester Schools, Mass. 1873. A. P. Marple, Supt.

Twenty-seventh Semi-annual Report of the Superintendent of Public Schools of Boston. Jno. D. Philbrick, Supt.

Report of the Massachusetts State Normal Art-School, Boston, Mass. January, 1874.

Forty-fourth Annual Report of the Public Schools of Cincinnati. 1872–73. John Hancock, Supt.

——WE will furnish THE NATIONAL TEACHER and *Littell's Living Age*, one year each, for $8.00; the TEACHER and *Lippincott's Magazine* for $4.00; the TEACHER and *St. Nicholas* for $3.75; the TEACHER and the *College Courant* for $3.50; the TEACHER and Northrop's "Education Abroad" for $2.50; and for $2.50 the TEACHER and the *R. I. Schoolmaster*, or the *N. Y. State Educational Journal*, or *Home and School*, or *National Normal*, or the *Nebraska Teacher*, or the *Tennessee School Journal*, or any other Educational Journal whose price is $1.50.

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THE

NATIONAL TEACHER:

A MONTHLY EDUCATIONAL JOURNAL.

Vol. IV. MAY, 1874. No. 5.

METHODS OF EXAMINATION.*

The examination is one of the teacher's most powerful instrumentalities. As an intellectual force, it may be so wielded as to become an efficient agency in promoting the ends of sound study, or degenerate into a means of cramping and perverting the highest faculties of the mind. As a moral force, it enters the secret place of the soul, and touches the hidden springs of conduct and virtue as well as knowledge.

The proper management of such an agency is a matter of serious importance, and deserves the thoughtful consideration of those whose business it is to teach. In the present discussion, however, it would be idle to prescribe any particular method to be used by all teachers, or by the same teacher under all circumstances. We are strangely unlike. Our methods of work must, therefore, be unlike. But our likeness is no less striking than our unlikeness, and our methods, dissimilar as they are and should be, must yet bear a strong resemblance to one another. It is as true of methods of examination as of methods of government or of teaching or of study, that while no one is always best, yet the best are always wonderfully alike.

To determine whether a method be wise or not, we must consider the end to be attained by it. The proper question, in this instance, is not, What method of examination is easiest? or, What one is most expeditious? but, What one will most

* A paper read before the Ohio College Association, at Westerville, O., Dec. 30, 1873, by Pres. W. D. GODMAN, of Baldwin University.

certainly and most effectually accomplish the true ends of an examination? In theory, the design of college examinations is to test the student's proficiency. They are employed to ascertain whether he has acquired such a degree of knowledge and discipline from the study he has been pursuing as to justify the discontinuance of it. Examinations serve another purpose, which is practically of no less importance than the former. They are not only tests of work after it has been done, but they are incentives to work while it is in progress. This end depends on the other. The value of an examination as an incentive is in direct ratio to its anticipated thoroughness as a test. The fact that his work will be tried by a careful and impartial examination, naturally operates on the student as a powerful stimulus to persevering industry. The teacher of elevated views will be cautious, however, lest the student's desire to appear well on examination exclude, or at least restrain, the operation of more worthy motives. He will labor to cultivate a love for study as well as for the rewards of study. The true scholar loves study, even the drudgery of study; and none of the prizes of common life possess half the power to charm as the solitary joys of his chosen pursuit. It is worth a teacher's toils and prayers to stir this lofty spirit within a student's breast, to wean him from lower incentives, and beget an insatiable thirst for the waters of intellectual life.

In the two respects now mentioned, an examination corresponds with the ordinary recitation. The latter is intended as a test of the student's preparation of a single lesson, and it acts also as an incentive to careful preparation. But the recitation has another prominent object which does not belong to the examination, to wit, assistance. The difficulties of the student are to be met, and the means of their removal pointed out. But when examination day has arrived, the time for affording help is past. The examiner who renders aid, transcends his own sphere, and enters that of the teacher. The minor object of an examination, then, is to incite the student to energetic and persevering labor while he is engaged in the prosecution of a study. Its chief object is to test the student's proficiency at the end of that time.

The essential qualities of an examination are *thoroughness* and *fairness*. It must be thorough. In the ratio that it fails to be thorough, it fails to be an examination. A superficial examination, where any examination is required, whether it be made

by a physician in taking the diagnosis of a disease, or by a court in the trial of a criminal, or by a Congressional committee in the investigation of the frauds and peculations of their fellow-members, or by a church committee in an inquiry into the conduct of wayward sheep or erring shepherd, deserves nothing but contempt. It must be fair. Otherwise the good may suffer discredit, while the poor pass with honor. To be fair, it must keep within the proper limits of the subject, must have due regard to the average ability and opportunity of the class, and must afford to all an equal chance.

What method of examination, then, most fully combines these indispensable qualities?

Let us begin with the preparation of questions. In those studies in which it can be employed, the best form for questions is the topical. It can not be necessary to insist that all leading questions, and all questions admitting of a simple affirmation or negation, should be strictly avoided; nor that all questions should be expressed in clear and exact language. I assume, although it is contrary to the usual college practice, that the questions should be prepared. In their preparation, there should be special reference to the work that the class has performed. Yet students are sometimes unjustly dealt with by being called on to answer examination questions on which they have had neither time nor means to inform themselves. No question should be asked, a proper answer to which would include matter with which the student has not had opportunity to become familiar. On the other hand, the questions should embrace a variety of topics. It is not enough to test a student on one or two points. "One swallow does not make a summer", nor does one good answer constitute a good examination. Each student should be tried at many points, in order that both his strength and his weakness may be discovered. Questions should be comprehensive. They should afford the student opportunity to exhibit the reach and grasp of his intellect and his power to sustain himself in prolonged effort. A question that is comprised within one short line, may require an answer several pages in length.

The questions being prepared, next in order comes the work of the class. Shall the answers be *oral* or *written?*

The usual way of conducting an oral examination is to divide the whole time set apart for it into as many equal parts as there are members in the class, and then ask questions of each mem-

ber for his allotted time. The topic or passage on which he is examined is selected at random from what the class has studied, and both questions and answers are given by voice. One advantage of this method is, that it cultivates readiness of utterance. Answers must be given promptly, for there is no time for hesitation. It also gives opportunity for cross-examination, thus enabling the examiner to put the student to the severest tests. It may also be justly claimed for this method, that it is less laborious than the other. It exacts less labor from the examiner; for, with a general knowledge of the subject, he may conduct the examination without any special preparation, and at its close his work is done. Nor is the student less fortunate, so far as it concerns the amount of labor required. Instead of writing he has only to speak; and instead of working an hour or two hours, he works but one-fifth to one-thirtieth or one-fortieth of that time, according to the size of his class.

Neither of these arguments has the merit of being conclusive. As to the gain in fluency of speech, it would seem that an examination affords but a meagre and unsatisfactory opportunity for culture in elocution. Five minutes devoted to off-hand speaking while the whole attention is absorbed in the study of unexpected questions and the mind is oppressed with the pending issue of its effort, is certainly not worth any great sacrifice. But even if the opportunity for improvement in speaking were of the most favorable kind, it would be unwise to prefer this advantage before the proper objects of an examination. Cross-questioning might, indeed, be employed to advantage, if half an hour, or even half that time, could be devoted to each student; but when fifteen or twenty students are to be examined within two hours, or, still worse, within one hour, it is impossible. An answer should be expressed so clearly and fully as to need no explanation. If it is so expressed, there will seldom be any need of subsidiary questions. If it is not so expressed, the fault belongs to the student, and he should be marked accordingly. It is true that in the unavoidable haste of an oral examination, there is some apology for crude and fragmentary answers; but this very fact is a strong reason against the method. To the claim that oral examinations are easy, I have no answer. The teacher with whom such an argument would have weight, is beyond the reach of any counter-argument.

Against oral examinations, as commonly conducted, it is to

be urged that they lack both thoroughness and fairness. The time that can be devoted to the examination of any single student is too short to admit of more than the briefest and most cursory questioning. Some time is, in most instances, necessarily consumed in merely tentative efforts on both sides. Since no topic can be completed, the examiner must be content to take up points, here and there, out of their natural connection. The student is consequently at a loss, and, before he can answer, must inquire the meaning of the question. Affairs are still worse, when the student, jumping at the whole meaning of a question from the sound of one or two familiar words, hastens into a vague and irrelevant answer, by which the examiner is, in turn, fairly bewildered. By such a process, how is it possible that even the most exact and painstaking student should exhibit anything like thoroughness of preparation? How can a conscientious examiner pronounce with confidence at its close upon the attainments of a class?

The unfairness of hurried oral examinations is as obvious as their want of thoroughness. A student whose knowledge of the subject pursued by his class is, with a single exception, most particular and complete, may have missed a difficult lesson through sickness or some other unavoidable circumstance. Yet he may be taken up on that very lesson, and, as the time to examine him is so short, on that alone. Unconquerable natural diffidence may cause a student to appear at disadvantage, no matter how familiar with the topic assigned him. The most experienced and effective public speakers often suffer from this cause during the first few minutes of a discourse, and it is only because they have time to overcome their timidity that they ever succeed as orators. But the modest student has no such advantage. He must do well at once, or not at all. Another, of less ability and less application, may find in the occasion a stimulus through which he greatly surpasses his more deserving class-mate. What is more common in oral examinations than for a good student to fall far below his ordinary standing, while the drone or the dolt acquits himself so well as to surprise both his teacher and himself? Indeed, in any given case, the probability is, that the student will do better or worse than he deserves.

Again, it is not possible by this plan to secure equality. All the members of a class can not be subjected to the same test or to equivalent tests. The superior student may have

assigned to him work that is exceedingly difficult of comprehension, or perhaps, though easily comprehended, there may be peculiar difficulties attending the explanation. The inferior student may light on a passage or a problem easy to understand and easy to explain, or on one that he has studied with especial care. In neither case is there time to discover the real state of the student's knowledge. The latter receives credit to which he is not entitled, and the former is unjustly humiliated. It must be admitted that all have beforehand an equal chance of happening on what is easy or well understood. But it is just such an equal chance as belongs to the lottery. It is morally certain that some will receive more, and others less, than they have paid for.

(*To be concluded next month.*)

THE OBJECT OF PUNISHMENT.

No teacher has a perfect school. No teacher can get along without inflicting punishment of some kind upon wrong-doers. He may be able to dispense with corporal punishment, but he must punish in *some way* so long as there are disobedience and wrong-doing in his school. A gentle reproof for a poorly learned lesson, or a stern look to a mischievous boy, differs in degree only, not in kind, from a severe feruling or a sound flogging. The success or failure of punishment depends very much upon the spirit and manner in which the teacher inflicts it, and these, in their turn, depend largely upon the view which he takes of the necessity and the object of punishment. It is important, then, for every teacher to understand the philosophy of punishment, and to be able to give a clear answer to the question, "Why do you punish your scholars?" It is the object of this article to answer this question.

It should be borne in mind that the object of punishment is the same in all governments. There is, to be true, a vast difference between divine, civil, military, family, society, and school punishments. They differ in form, in duration, and in the person or persons who inflict them, but they agree in having a common object, a common *reason why* the punishment is inflicted. The relation of punishment to wrong-doers and

wrong-doing is the same in all those organizations which are marked by the governmental idea.

Let us first notice some of the false reasons for inflicting punishment.

1. Punishment should never be inflicted from revenge or envy or jealousy or pride, or any of that class of feelings. A teacher who is influenced by such feelings in inflicting punishment, must despise himself, and will surely be despised by his pupils.

2. Nor is the instinct that prompts to punishment a sufficient reason for inflicting it. We all have such an instinct, and it was implanted in our constitution for a wise purpose. When a crime is committed or a wrong done, this instinct demands the punishment of the offender, and is satisfied with that punishment. Without this instinct in man, it is doubtful whether any government could be sustained. But the mere instinct is blind, and must not be allowed to sway the judgment. It must be under the control of the judgment, otherwise we shall make many mistakes. "Be ye angry (at all wrong-doing) and sin not." The teacher who punishes under the influence of excited anger, and in a way that shows that he enjoys inflicting the punishment, will not be sustained by the common sentiment of the school. If he can not control his feelings, the punishment should be deferred until he can.

3. Punishment should never be inflicted *simply* because the offender deserves it. Ill-desert furnishes a ground for inflicting punishment, but is not *in itself* a sufficient reason for it. A person under just authority has broken a law. Now we will suppose that the one in authority *absolutely knows* that that person will never do wrong again, and also that no one in the universe will be influenced, even in the remotest degree or manner, by his sin, or by the fact that it goes unpunished, *the infliction of punishment under such circumstance would be so much unnecessary pain.* It would do no good. And this shows that ill-desert in itself is not a sufficient reason for punishment.

It may be said that punishment should be inflicted in such a case to sustain the dignity of the law. But the object of sustaining the dignity of the law, is to keep men from doing wrong, and if, as was the case in the supposition, that object is already gained in another way, then no pain need be inflicted. No person, however ill-deserving he may be, should be punished, unless his punishment is going to do some good—that is,

unless it is going to operate in some way to prevent wrong-doing in the future.

This brings us to the true reason for inflicting punishment. All the reasons that can be given are summed up in one simple, comprehensive reason that applies to *all* legitimate punishments in *all* governments, viz: *Punishment is inflicted to prevent wrong-doing.* It may prevent wrong-doing in the offender only, or in others only, or in him and others also. There are circumstances in which punishment is inflicted solely with reference to its effect upon the offender. Such is the case in a family where there is but one child. There are other circumstances in which punishment is inflicted solely with reference to its effect upon others. Illustrations are found in capital punishment and in eternal punishment. These could not be defended for a moment, if the reformation of the offender were the only object of punishment. It is a great mistake to suppose, as some do, that the reformation of the offender is the only or the principal object of punishment. It is, indeed, true that the relative importance to be attached to the reformation of the offender increases as the number of subjects diminishes, so that if the number be reduced to one, and that one the offender, his reformation becomes the great object of punishment. But such cases are rare, if they exist at all. The general statement that punishment is intended to prevent wrong-doing covers *all* cases, even those in which there is no wrong-doing to be prevented except in the offender. While the statement that the object of punishment is the reformation of the offender is only a partial truth, and sometimes is not even that. If the offender can be reformed, *so much the better*, but if there is absolutely no hope of his reformation, the punishment must still oftentimes be inflicted. It is so in God's government; it is so in the state; it is so in the school.

Punishment operates in two ways to prevent wrong-doing.

First, it brings the motive of fear to bear upon the minds of those who are disposed to do wrong. This is a proper motive to use with such persons. They must be restrained from doing wrong, if not by a higher motive, then by a lower.

Secondly, it gives to all an impressive exhibition of the nature and guilt of wrong-doing, and of the justice and dignity of the law. The person who has a proper idea of these things is not so apt to do wrong, as is the person whose ideas of these things are faint and indistinct.

Now let us make a practical application of these principles to the school. The school is a government in itself. The teacher is the governor. He combines, in most cases, the legislative, judicial, and executive offices. In order to secure that good order and decorum, without which the great object of the school can not be attained, the teacher lays down certain rules. They are for the public good, for the good of the whole school, and hence for the good of each individual in the school. The fact, however, that it is for their interest to keep the rules, does not induce all to keep them. One of the scholars breaks a rule. If he is not punished, he will be encouraged to break it again and again, while others, influenced by his example, will do likewise. But if the teacher firmly yet kindly inflicts the punishment, the *fear* of suffering similar pain or disgrace has the *tendency* to prevent the offender and others like him from breaking that rule in the future. At the same time, if a suitable punishment is properly inflicted, the whole school receives a deeper impression of the necessity of the law, the estimation in which it is held by the teacher, and the guilt of disobedience—and that impression has a tendency to keep them from doing wrong. The punishment may reform the offender. It is very desirable that it should. But if he is perfectly incorrigible, he must be expelled from school,—not simply to cut off his wrong-doing, but as an example and warning to others.

Let the teacher thoroughly understand the necessity and reason for inflicting punishment; let him also, by familiar talks and illustrations, make his scholars understand the same things; then let him, by his manner in inflicting punishment, show that he does it from a sense of duty, for the good of the school, not because it gives him pleasure—let the teacher do these things, and he will find school government much easier than he supposes.

Andover, Mass. R. T. Cross.

ARE THE "NEW METHODS OF EDUCATION" NEW?

Some light may be thrown on this question by a reference to Mr. Venable's articles in the February and March numbers of the Teacher on "Aristotle and Education." Does not our public-school system, and even compulsory education, harmonize with the doctrine of Plato and Aristotle that education is a

public duty? Do not the arguments for light gymnastics, as against heavy gymnastics, agree with Aristotle's view that the gymnastic exercises of boys should be gentle and not violent, since violent exercises are brutalizing and incompatible with study?

Let us see what can be learned from Marcus Fabius Quintilianus (A.D. 42?—118?), the eminent Roman Rhetorician. He presents his educational views in his *Institutiones Oratoriæ*. He contends that it is a mistake to say that few persons have naturally a quick apprehension. He declares that quickness of apprehension and susceptibility of instruction are characteristic of mankind. As the natural propensity of birds is to fly, of horses to run, and of wild beasts to be savage, so is intellectual activity natural to man. The dull and unteachable are natural only in the sense in which monstrosities are natural. Whenever a promising boy disappoints the hopes of his friends, there is a want of care in his education. Although persons may differ in natural capacity, yet there is no one whom study does not improve. He quotes Chrysippus for the assertion that every nurse ought to be a woman of sense. He considers that good morals in nurses are of the most importance, but, at the same time, they ought to speak with propriety. As new vessels retain the flavor which they first get, so we are very tenacious of what we imbibe in the dawn of life. Wool can not be restored to its native whiteness after it has been dyed. The more vicious a habit is, the closer it will stick. Good habits are easily changed to bad ones, but who ever knew a bad habit changed to a good one? A child should not be used to any thing in infancy which he must afterwards be at pains to unlearn. He saw the necessity of learned parents for the highest educational results. The mother of Gracchi, Cornelia, had a purity of style which had its effect on the eloquence of her sons. It seems that public speaking by ladies is not modern, for Quintilian says the eloquence of the daughter of Lælius resembled that of her father, and that the daughter of Quintus Hortensius pronounced before the Triumvirs a speech that would do honor to the eloquent of our sex.

He thinks that tutors ought to be men of real learning, and, if not, that they be sensible that they have no learning at all. His opinion of a smatterer is very forcibly given. He discusses the assertion that the education of a boy ought not to begin until he is seven years of age, because before that age the

mind is neither capable of instruction nor able to endure the toil. This opinion, he says, was adopted by Hesiod and Cratisthenes. He argues against this view in such a way that one might even imagine him to be acquainted with the notions of modern kindergarteners. He says "let us not, therefore, lose even the most early hours of life, etc." He does not want a full task to be required of the little child; a full task might create a dislike for learning. "Let his study be made his diversion; let him be soothed and caressed into it."

Even studies have their infancy, "and as men, even of the most robust constitutions, have in their infancy been fed with milk and rocked in a cradle; so there was a time when the voice of the most eloquent orator was an inarticulate sound; when it indistinctly lisped out his meaning, and when he was puzzled even about the letters of the alphabet."

He was dissatisfied with the general method of instruction that required young children to learn the names and relations of letters before learning their shapes. Repetition by rote prevented them from applying their minds to the study of the forms of the letters. "This is a good reason why teachers, even after children are thoroughly instructed in the letters, as they usually follow one another, should disarrange and change them, and alter their places, till such time as the scholars should know them by their shape, and not by their order of standing. They will then know letters as we know men, by their appearances and their names." He does not disapprove the common method of giving to children the forms of the letters cut in ivory, to play with, nor of any other invention that will be more attractive to young children, nor of any thing that they can take pleasure in by handling or looking at.

Here is some consolation for writing teachers, and also a suggestion that might be turned to account by the makers of school apparatus. When a child begins to trace the forms of letters, they ought to be very elegantly carved out on a board, in order that he may run his pen over them as through so many grooves. If the sides of the board be guarded with ledges, these ledges will prevent him from writing irregularly or out of compass. The more frequently and quickly he follows fixed delineations, the sooner he will form his hand. "Men of quality are in the wrong to undervalue, as they often do, the practice of a fair and quick hand in writing; for it is no immaterial accomplishment." He shows the advantages of good penmanship and

that it should be acquired at the most early time of life. This tallies with the early introduction of script into some of our best schools. We ought not to be overhasty in trusting to a young memory; it is more improving to repeat a thing and inculcate it on the understanding.

He next shows the evil effects of hurry in reading. I omit a reference to these. Copies set for the improvement of the hand-writing of a child, should not be an unmeaning set of words, but they should convey some beautiful sentiment, the remembrance of which will stick to him when he is old, and which, stamped on his young mind, will improve his morals. He also recommends the teaching of the sayings of illustrious persons, and of beautiful passages from the poets who are generally favorites with the young. As a young child is incapable of striking out anything of itself, the memory is almost the only faculty that can be impressed by the care of the teachers. We have a warrant for such sentences as, "Theophilus Thistle, etc., Round the rugged rock, etc., etc.," in the following: "It will not be amiss for him [the older pupil] to repeat over with rapidity certain words and lines of a studied harshness, and chained together by grating sounds and jarring syllables, so as to make one roughness of the whole. Such lines were by the Greeks called *chalepoi.*"

[*To be continued.*]

Salem, Ohio. W. D. HENKLE.

THE PRIMARY TEACHER.

"Who can not teach little children!" is a time-honored exclamation. The acquirements, accomplishments, associations, and character of the primary teacher have long received little public consideration. Not only has it been thought that learning and a knowledge of the polite arts are of little value in a primary school, but true refinement, good breeding, and graceful manners have also been regarded as of little consequence. "It would be a waste of money", cry our school boards, "to demand such qualifications in the teachers of the little children in our lower schools."

Happily, these ideas are gradually passing away, and the primary teacher is beginning to be considered as something more than a mere nursery maid for the public! Much is being

said of her heavenly mission, of the divine importance of her work, of its vast magnitude, and its far-reaching results. This truer view comes to us from many sources, and we belive the era is dawning, when the primary teacher shall be considered among the first of our instructors; when the full meed shall be granted to her now unappreciated efforts.

Is there any reason why a primary teacher should not be as highly educated and receive as large a salary as the teachers of our high schools? Because her instruction consists only of the elements of reading, and the first principles of number, with a few simple object lessons, need her qualifications extend no farther than an elementary knowledge of the branches taught in her own room? With a well-disciplined mind, a higher culture, a knowledge of other branches, will she not teach more wisely and more faithfully, and govern more judiciously? A teacher thus liberally educated will have a more lasting influence over her pupils, will inspire them with loftier aims and nobler purposes than one whose preparation is limited to the mere elements. She knows to what her instruction is tending, and she will lure her pupils to more excellent attainments by her own interest and love for these pursuits. This higher knowledge is a higher world, and only those know its beauty who have themselves walked its streets, trod its golden pavements, and gazed with eager eye upon its classic fields.

A primary teacher, who is possessed of this wider culture, will also work with more method. A well-disciplined mind will the more thoroughly discipline those of her pupils. Her illustrations will be more exact and pointed, and her thoughts will have a finer flow. Her language will be more elegant, her manner more refined and graceful, begetting an added refinement and grace in her pupils, and, as a consequent, the whole work of the schoolroom will rest upon a broader basis than is possible where the teacher has seen nothing more than the inside of a district school, is untasteful in dress, rude in manners, and uncultured in thought—whose life has not been exalted by intercourse with minds of loftier impulses and nobler aspirations.

With how much greater degree of success will object lessons be taught, if the teacher has an extended knowledge of the natural sciences? In fact, can they be taught successfully without this knowledge? True, a teacher may by study obtain a slight smattering of information, may pick up a few stray

facts here and there, but it is futile to undertake a thorough and systematic course of object teaching, without a good understanding of botany, zoölogy, etc. A very few lessons will suffice to show a teacher that she is entirely incompetent for such a task. In the reading lessons, in the explanation of the meaning of words, and in many incidents occurring in the daily work of a primary teacher, there are numerous occasions for immediate reference to past study and experience, and without this, these opportune moments will not be properly improved. Very much useful information can be given even to little children by teachers well versed in history, natural science, and the other higher branches taught in our high schools. With what avidity will such a teacher seize every opportunity to open new fields of thought!

Upon the primary teacher also devolves the duty of forming correct habits. Who has not learned from bitter experience, the pernicious effects of practices formed in childhood, which no future effort, however great, can ever remove? How the uncouth gesture and the illiterate speech cling to our after life, defacing and marring our most earnest endeavors for a higher improvement and a greater self-perfection? If a sing-song tone in reading or an impure pronunciation is acquired, how many years of labor are required to overcome it. But if a pupil is taught a correct pronounciation of the first letter or word; if the first "dog" and the first "cat" in the book or on the board become to him representatives of living objects, to be spoken as in his infantile sports with these animals, how large a part of the labor of becoming a fine reader or speaker has been accomplished. Two-thirds of the poor reading, abominable elocution, and still more abominable pulpit eloquence, that fill our land, is due to the miserable methods of teaching reading in our primary schools.

Again, upon these primary teachers rests the task of instilling into the youthful mind principles of justice and integrity, and of checking all wayward tendencies to vice and sin. Many parents fear to commit their children, pure and innocent, tenderly reared, and carefully shielded from every appearance of evil, to the demoralizing influences of many primary schools where all, cultured and uncultured, rich and poor, are thrown together promiscuously, meeting alike upon a common level, and where the simple, trusting child is subjected to the vicious and corrupting words, looks, and tones of the vilest inhabitant

of the lowest sink-holes of the towns. Oh how wise, vigilant, and zealous should be the teacher to whom the eternal interests of these little children are committed! Their spirits are fresh and tender. Any impressions made on them are as enduring as the characters traced upon the Moabite stone. From our primary schools are to come the Websters and Beechers of the country. Here must be developed their internal powers, and here must they catch the inspiration of greatness.

And why should not the salary of these primary teachers be equal to that paid the teachers in the higher departments? With equal education and equal work, what reason is there for a smaller remuneration? And yet we have hardly an instance in which the teachers of our primary schools receive the same compensation as the principals or assistant teachers in our high schools. Many affirm that their work is not equal. We believe that the work of the primary teacher is greater. It is more severe upon the nervous system, more wearing, and it taxes more the physical organization. Look into one of these primary rooms. Here are from eighty to one hundred little, restless, moving bodies, with mischievous fingers, roguish eyes, and sparkling thoughts to be kept through the entire day in the most approved order, and the whole day's work must be as definitive and well-adjusted as the discipline of an army of the best soldiers. Think you there is no mental or nervous strain in such a day's work?

It is conceded by nearly all that primary teachers wear out faster than almost any other class of working people. Only a short time ago, we met such a teacher traversing the country as a book agent. Her health had failed her, and as a means of self-support, she had been compelled to resort to the occupation of a book peddler. She said to me, with tears in her eyes, "I shall never teach again. My nervous system is completely prostrated. It even makes me sick to think of entering a schoolroom." This is not an isolated case. Two young ladies (sisters) in a neighboring town, having taught until trembling limbs and symptoms of insanity admonished their friends that the employment must be given up at any sacrifice, left a loved life-work, and went into a second-rate boarding-house as the only means of support. The testimony of our most eminent physicians sustains this view. Only a few days since one of them remarked to us that not one of his girls should ever teach school — that it was a soul and body destroying business.

"Why", said he, "there is scarcely a teacher in the lower departments of our school, who is not afflicted with some disease incident to this kind of labor. I am called nearly every week to prescribe for some of these primary teachers. And yet they are spending their days on a meagre pittance of two or three hundred per year,—a sum barely sufficient to pay the most necessary expenses." Said a teacher in Indianapolis, upon her death-bed, "Let my epitaph be, '*Died of over-work*'", and this same teacher came to her death solely *by standing constantly in the schoolroom*, and the over-exhaustion consequent upon this pernicious requirement.

This is not the case with our high-school teachers. There is less of this nervous strain, less prostration, and less of this physical torpor which comes so suddenly upon our primary instructors, and yet in these departments teachers receive five hundred to seven hundred and even as high as one thousand dollars a year.

This custom of paying primary teachers a smaller salary than is paid other teachers, is the principal cause of the ignorance and inefficiency of this class of teachers. Our best instructors, those who have spent years in obtaining a complete and finished education, will not give up their time to these lower departments, with the small salaries now commanded, and, as a final recourse, our school boards are brought to the necessity of filling these places with *cheap* teachers—half-educated, young, inexperienced girls, who teach only a few months or a year or two at best, with no intention of making it a life-long occupation, and preparing themselves thoroughly for it, giving it a whole heart, soul, mind, and body, feeling that no amount of effort is too great for so noble and worthy an employment. If we paid higher salaries in these lower schools, we would obtain a better class of teachers.

Let the first primary room, where the infant mind receives its most decided impressions for life, be placed upon an equal basis with the high school, as regards salary, education, and culture, and soon a change, lasting and beneficial, will be permanently secured in these the most influential and controlling departments of our public schools.

SARAH C. STERLING.

Three Rivers, Mich.

THE PROPER USE OF THE WORDS, WOMAN, LADY, AND FEMALE.

Much discussion has arisen regarding the correct use of the three words above given, in their application to the *female portion of humanity*, and although, within the last few years, there has been a marked improvement in their use among educated persons, there still exists much ignorance upon this point.

Much has been accomplished through the pen and influence of Mrs. Sarah J. Hale, in causing a discontinuance of the word *female* as part of the title of educational institutions for young ladies or women. But "*Female* Seminary", "*Female* College", "*Female* Department", etc., are still not uncommon. Is the seminary or college, designated as "Female", designed for the education of some of the lower animals, for surely *female* applies to sexual distinctions of *all* animals; or is it designed (even considering that *feminine humanity* is meant) for all ages and conditions, from little girls to aged women, married and single? There is a manifest absurdity in the use of the word *female*, except as a distinction of sex, and as we are not accustomed to degrade the true meaning and application of the word *male*, by such terms as *male college*, *male influence*, *male prayer meeting*, *male piety*, etc., why should we not use the word *female* as correctly?

With the modern impetus given to an enlarged sphere for woman's abilities, comes a necessity for a coinage of new words, or rather a revival of words which, in the early literature of our language, were in common use. Not more than twenty years ago, the Rev. R. C. Trench, whose valuable works on "The Study of Words" and "Language", have added much information to the history of our language, predicted that all such words as then received a feminine affix, as prophetess, heiress, sorceress., etc., would one day disappear altogether from the language. In Wiclif's Bible, in Chaucer, Spenser, Shakespeare, and other early writers, feminine terminations, not only of *ess*, but of *ster*, as *baker*, *bakester*, *seamer*, *seamster*, were largely prevalent. They, however, gradually fell into disuse; some of them only to be revived by the fresh demand for words applicable to feminine professions and pursuits which heretofore were monopolized by men. The new constitutions of several states make women eligible to school offices, and it is to be hoped that school directresses will not be called *female directors*.

The following is a list of feminine titles or pursuits, ending in *ess*, which are authorized by the best English writers:

PROFESSIONS, PURSUITS, ADDRESSES, ETC.

Actor, Actress; Author, Authoress; Doctor (*Dr.*), Doctress (*Drs.*); Host, Hostess; Hunter, Huntress; Instructor, Instructress; Master (*Mr.*), Mistress (*Mrs.*); Monitor, Monitress; Painter, Paintress; Postmaster, Postmistress; Porter, Portress; Shepherd, Shepherdess; Sorcerer, Sorceress; Steward, Stewardess; Tailor, Tailoress; Tutor, Tutoress, Governor, Governess; Waiter, Waitress.

TITLES OF OFFICE, RANK, RESPECT.

Abbot, Abbess; Administrator, Administratrix; Ambassador, Ambassadress; Baron, Baroness; Benefactor, Benefactress; Chairman, Chairwoman; Countryman, Countrywoman; Deacon, Deaconess; Director, Directress; Earl, Countess; Emperor, Empress; Executor, Executrix; Gentleman, Lady; Hero, Heroine; King, Queen; Knight, Lady; Lord, Lady; Marquis, Marchioness; Monk, Nun; Peer, Peeress; President (U. S. A.), Mrs. President; President (College), Presidentess: Priest, Priestess; Prior, Prioress; Prophet, Prophetess; Python, Pythoness; Seer, Seeress; Testator, Testatrix; Viscount, Viscountess.

The title of *lady* is derived from two Saxon words which signify *loaf-day*, which words have, in time, been contracted into the appellation, *lady*. It was a hospitable custom in England, many years ago, for the lady of the manor to distribute to her poor neighbors, *with her own hands*, a certain quantity of bread. Hence the title of *lady* was associated with *loaf-day*. The word was originally applied only to the daughters of nobility or to women of high rank, but custom has made it a word applicable to all women of eminence or culture in mind or manners, in distinction from unlettered or uncultivated women.

Woman is the generic term for all female adults of the human race, without distinction of color or culture. In the highest and truest sense, it is one of the noblest words in the English language. It embodies all that is virtuous and lovely in character, and all that appeals to the good and pure in human nature.

Philadelphia, Pa. M. J. W.

A HEAP.

Some time ago Prof. E. B. Andrews spoke to the writer concerning a custom which prevails in many places, of buying and selling by *heaped* measures, and suggested the idea of making comparisons of the relative values of heaped measures and "struck" measures. By "struck" measures I mean meas-

ures first filled, and then scraped off with a straight edge. This word, although in common use, has not, I believe, the authority of the lexicographers, the word "strike" being, however, applied to the instrument with which the measure is struck. I have recently acted upon this suggestion with results which seem to me of considerable interest to those engaged in teaching "weights and measures." I therefore give them, together with a number of facts concerning the Ohio standards of measures, also of interest and not generally known.

In making these experiments, the state standard half-bushel, gallon, quart, etc., were used, and the calculated results can only be true for measures of the same or similar dimensions. The standard half-bushel is of dimensions similar to those commonly in use. In regard to the smaller measures, it may be said that the variation in form between the standards and those in common use, is such as to increase the percentages of gain given below when they are heaped. It is plain that much depends on the form of the measure, as the value of the heap, other things being equal, will vary as the cube of the diameter of the circle which is its base. In heaping a measure it was placed upon a level table, and a fine stream of wheat was allowed to fall into it from a point directly over its centre, and this was continued until all which fell on ran off at the circumference. The height of this heap above the level of the struck measure was measured, and the heap being carefully removed was itself measured by the use of the smaller standards. This kind of a heap is, of course, rarely, if ever, obtained in practice, but it is often approximated to and, with some articles which will *stick* better than wheat, considerably exceeded. It was, therefore, assumed as a basis upon which to estimate these relative values. To render the results more easily understood, I give approximate dimensions of the state standard measures, also that they may be compared with those in actual use in any particular locality.

These measures are all cylindrical, their dimensions being such as to show on the part of the makers the intention to make the altitude to the diameter as 2 to 1 in all except the half-bushel, in which the diameter is double the altitude. Let it be noticed that these measures are only approximate—true probably to within two or three hundredths of an inch—and that there is often a slight *rounding* on the inside at the junction of the flat base with the cylindrical wall.

DIMENSIONS OF STANDARD MEASURES—*in inches.*

	Altitude.	*Diameter.*		*Altitude.*	*Diameter.*
Half-bushel...	7	14	Quart.....	6.7	3.31
Gallon.....	10.45	5.30	Pint.....	5.23	2.63
Half-gallon....	8.42	4.17	Half-pint.....	4.16	2.09

The *heap*, as previously described, on the half-bushel was not conical, but rounded at the top. Its height was 3.8 inches, and its capacity 4 quarts 1.44 pints or 272.58 cubic inches. The capacity of cone, with same base and same altitude, is 194.98 cubic inches.

In comparison, the following facts are given. The bushel is supposed to be measured in half-bushel measures. The per-cent of gain is calculated upon the customary basis of 32 quarts to the bushel; that is, in fixing the price of any article bought by the bushel and sold by the quart. This is the assumption, although the real standard quart, which is much smaller, is almost invariably used. In the table of percentages of gain, the selling price per quart is, therefore, assumed at one thirty-second of the cost price per bushel.

1 bushel *struck* equals
- 2150.42 cubic inches.
- 32 dry quarts *struck*.
- 30.4 beer " "
- 37.2 wine " " (This is the standard qt.)

1 bushel *heaped* equals
- 46.6 standard quarts *struck*.
- 44 " " *heaped*.

PERCENTAGES OF GAIN.

1 bushel *struck*, sold by standard qts. { *struck*, 16 per cent. / *heaped*, 9 " }

1 bushel *heaped*, sold by standard qts. { *struck*, 46 per cent. / *heaped*, 37½ " }

Ohio A. & M. College, Columbus, March 18, 1874. T. C. M.

——It is the unvarying decision of wise men, whether in ancient or modern times, that the instruction of youth will always be best when it is pleasantest. The tenderness of youth requires of us that we should not overstrain it; its innocence, that we should abstain from harshness. That which enters into willing ears, the mind runs, as it were, to welcome, seizes with avidity, carefully stows away, and faithfully preserves.—SACCHINI.

EDITORIAL DEPARTMENT.

—— We are very glad to learn that the friends of the late Professor Agassiz propose to raise a memorial to him, by placing upon a strong and enduring basis the work to which he devoted his life, the Museum of Comparative Zoölogy, which is at once a collection of natural objects, rivaling the most celebrated collections of the Old World, and a school open to all the teachers of the land. It is proposed that the teachers and pupils of the whole country take part in this memorial, and that on the birthday of Agassiz, the 28th day of May, 1874, they shall each contribute something, however small, to the Teachers' and Pupils' Memorial Fund, in honor of "Louis Agassiz, Teacher"; the fund to be kept separate, and the income to be applied to the expenses of the Museum. The circular is signed by Hon. John Eaton, National Commissioner of Education, Prof. Joseph Henry, Secretary of the Smithsonian Institution, Secretary Joseph White, of the Massachusetts Board of Education, Supt. Harris, of St. Louis, and Messrs. Edward J. Lowell, John S. Blatchford, and Jas. M. Barnard, of Boston. We look upon this movement as one of national importance, and we believe that the teachers of the United States will generously contribute to this memorial offering to one who did so much to raise the dignity of the profession and improve its methods. All communications and remittances for the "Teachers' and Pupils' Fund" of the "Agassiz Memorial", may be sent to the Treasurer, Jas. M. Barnard, Room 4, No. 13 Exchange Street, Boston.

—— We wish that our correspondent had referred more fully to the bad practice of using the words *male* and *female* as nouns to denote respectively a man or boy and a woman or girl. This use is quite common in school reports. We read of the number of *males* and *females* enrolled in the schools; the number of *males* and *females* employed as teachers, etc. It is understood, of course, that the "males" and "females" belong to the human race, but in some cases this fact is not so clear. When a writer states that there are fifty thousand more *females* than *males* in Massachusetts, we must depend upon the context to show whether he refers to the people or to the horses. We have specific words to denote the male and the female sex of the genus *homo*, and why not use them? It is is true there is no one word that denotes both women and girls or both men and boys, but the cases are rare when such a word is needed. The difficulty may be usually avoided by using the word person, or a similar word, and qualifying it by the adjective male or female. There is certainly no excuse for saying, "The audience was addressed by a *female*"; "The primary schools are all taught by *females*"; "The best spellers in the school are *females*", etc. A few writers have even objected to the qualifying of any noun denoting a *human being* by the ad-

jectives male and female. But this view is not in conformity with the very best usage. Such expressions as "a female teacher", "a female superintendent", "a female physician", etc., are both correct and elegant. The words teacher, superintendent, and physician have no well-authorized feminine form, and the same is true of pupil, scholar, student, speaker, writer, and several other words in common use. While it is proper to say "a lady teacher", we prefer the expression "a female teacher", and we certainly would not venture to say "a lady writer", much less "a lady pupil" or "a girl pupil." The words teacher, pupil, physician, writer, etc., denote each a human being, and the qualifying word female denotes the sex. When a word denoting a person has authorized masculine and feminine forms, as host, hostess, actor, actress, these forms should generally be used, but there is a noticeable tendency to drop the feminine form of many of these words.

—— The propriety of applying the terms *male* and *female* to objects that have not sex, can only be settled by an appeal to good usage. Such expressions as "female arts", "female character", "female dress", "male attire", etc., are used by the very best writers. The word *feminine* is generally applied to the characteristics of the female sex, and hence we say "feminine accomplishments", "feminine jealousy", etc. We think our correspondent is correct in the statement that such expressions as "female colleges", "female schools", "female societies", "female prayer meetings", etc., are much less used than formerly, and we hope that they may soon be entirely discarded. "A girls' school", "a ladies' seminary", "the ladies' prayer meeting", or, better, "the women's prayer meeting", and "the women's temperance league" are certainly preferable to "a female school", "a female seminary", "the female prayer meeting", and "the female temperance league." We also like the distinction made by our correspondent in the terms *lady* and *woman*—a distinction unheeded by those visitors to our state prisons who ask to see "the *ladies'* department"! While we have no admiration for the manner in which the word lady is used in England, we do not like to see it applied indiscriminately to all women, and nothing can be more offensive to good taste than its application to an adulteress or harlot, as is sometimes done in the modern American novel. The word has a noble origin and meaning, and it should be used as an appellation of honor and respect. We like to see the word woman used whenever man would be proper, if a reference was made to the opposite sex. There is a pleasing dignity in such expressions as "the woman movement", "woman suffrage", etc.

—— The *Wisconsin Journal of Education* for March contains three contributions and an editorial on the high-school question. The necessity of a grade of schools between the common school and the college is urged by all, and different plans of supplying this need are suggested. The editor advocates a system of high schools for the rural districts, cor-

responding to the high schools in cities and towns, and that these be supplemented by "Local Normal Academies" for the education and training of teachers for the common schools. He thinks that it may not be necessary to provide such an institution in every county, but that they should be sufficiently numerous to meet the public demand. He suggests that each school should have two associate principals, one for normal and one for academic work. He believes that the teachers' institute can not be relied on to provide professional instruction for the great body of teachers who do not attend the state normal schools; that this elementary normal instruction must be more systematic, permanent, and effective. We are glad that American educators begin to see that the normal question and the high-school question involve each the other; that what is needed is not merely a system of secondary schools to fill the gap between the common school and the college, but that these secondary schools must also supplement the higher normal schools as agencies for the education of teachers. It seems idle to look for the organization and public support of two systems of secondary schools the one for the higher education of our youth generally, and the other for the special education of teachers. How can these two ends be met by the same system of secondary schools? Is the plan suggested by our Wisconsin contemporary feasible?

—— THE *Michigan Teacher*, in a brief review of Mr. Hawkin's report on "Compulsory Education", thus states its want of confidence in the success of the measure in this country:

> It may be freely conceded that the theory, the logic, and many of the facts, are with the advocates of compulsory school-attendance, or equivalent private education. We believe the argument for the right of the state to self-protection through popular education, is impregnable. Yet we are obliged to add, after careful and wide study of the subject, and patient waiting for the results of experiment, that we have no present hope of the success of any compulsory act of the kind, in any state of the Union. None has yet succeeded—not even the vaunted "Truant Act" of Massachusetts. In Michigan, under favorable conditions the trial has been made for two years and a half, and without perceptible results in increasing school attendance, or stimulating home education. The general testimony is, that no attention whatever is paid to the law. The notices required by the act were, with rare exceptions, not even posted by the school officers last fall And so long as republican liberty means license to a large class of our citizens,—so long as the average American is intolerant of interference in his household affairs, and the officers of the law are dependent upon popular favor for re-election,—we do not expect to see compulsory attendance enforced in any part of the country, however stringent the enactments.

The *Illinois Schoolmaster* for March takes a similar position, and expresses the hope that the bill then pending in the Illinois Legislature, may not become a law. (The bill was subsequently defeated in the Senate.) It questions the expediency of such legislation, and expresses the fear that attempts to enforce a compulsory law, would awaken increased opposition to the public school system. It urges that the great need is *better schools*, and these will come when we have have *better teachers*. The *New York School Journal* is, on the contrary, earnestly advocating the adoption of the compulsory system.

—— THE *Normal Monthly* comes to the defense of mental arithmetic, which it says is "losing its prestige, and falling into disrepute." There

is unquestionably a wide and increasing reaction against the practice of making mental arithmetic a separate branch of study, but we have not heard the popular cry, "Mental arithmetic is a humbug", which so swells in the ears of our esteemed contemporary. "Mental arithmetics are a humbug", is the out-cry heard in this quarter—a very different sentiment. The introduction of mental arithmetic into American schools, some thirty years ago, resulted in two separate and almost independent courses of arithmetical instruction, with separate text-books and recitations, and a consequent monopoly of time at the expense of other branches equally important. Mental arithmetic was made a hobby and, like all hobbies, was sadly overridden. What is now demanded is, that these two courses, designated as "mental" and "written", be combined, and that arithmetic be no longer allowed double time in the schools. For a time teachers were not aware that a union of the two courses was practicable, and the necessity of giving arithmetic but one daily recitation, to allow time for other studies, resulted in the dropping of mental arithmetic in many schools. But the problem of uniting the two courses in one has been practically and successfully solved, and mental arithmetic is to have its true place in our schools. We shall not mourn the disappearance of mental arithmetics, but we have an abiding faith in the value of mental arithmetic, and when united with written arithmetic, its true position, this "beautiful system of arithmetical analysis" will not only be safe, but will accomplish its highest possible results.

—— We have received a letter from Miss Comings, of the Missouri State Normal School at Kirksville, submitting a plan for introducing drawing into country districts and smaller villages—districts which are not able to employ a permanent special teacher of drawing. As the great difficulty in this work is the starting, she suggests that teachers of drawing be employed from one to eight weeks—according to the financial ability of school districts—to initiate a course of instruction and train the teachers in carrying it out. Once introduced in this manner, a little fostering care and oversight will, she thinks, keep up the interest in the subject and secure good results. She believes that competent instructors will not be wanting, if the public can be made to feel that the plan is feasible. We think that the plan suggested is a good one. The chief difficulties in the way of its general adoption are the want of a public appreciation of the practical value of drawing and the want of coöperation among country districts. The teaching of drawing in the graded schools in cities and towns and in teachers' institutes will soon measurably remove the first. When a sufficient public interest in the subject exists, it will not be difficult, we judge, for a county superintendent to induce the requisite number of school boards to employ a special teacher of drawing, in the manner proposed. Until such a coöperative system can be organized, teachers of drawing must go from district to district, creating an interest in the subject and securing temporary employment. But we hope that the time may soon come when both drawing and music

will be taught in our country schools under the supervision of competent teachers, employed for the purpose as they are now employed in cities and the larger towns. To this end, several adjacent townships must be united as a drawing or music district, as the case may be, and the special supervisory teacher therein must go from school to school as often as may be necessary to secure systematic and efficient instruction.

—— A LATE number of *The Advance* contains a brief but able paper by Hon. Schuyler Colfax, on the movement inaugurated in Minnesota to destroy the State Normal Schools on the ground that "they do not pay." Mr. Colfax asserts that all experience has proved that "normal schools and teachers' institutes which are normal in their character, *do* pay, and are really the truest and most efficient helpers of the common school." Though the offspring of these later times, the normal school, first in the Old World and then in the New, has demonstrated both its utility and necessity, and the present great need of American schools is a supply of thoroughly trained teachers. "Other things being equal", says Mr. Colfax, "the best teachers will inevitably develop the best scholars", and we will add that, other things being equal, the teachers who have received the best professional training, are the best teachers. Wherever the normal school, the teachers' institute, the educational journal, and other agencies for the professional training and improvement of teachers have done their work most wisely and thoroughly, there are found the best teachers and, as a consequence, the best schools. It is too late to question the value of a professional training to the teacher, and it is certainly futile for any one to oppose the only agencies by which such training can be provided. We do not believe that the present legislature of Minnesota has enough educational Rip van Winkles in it to destroy her excellent normal schools. The fact that it has an Ignatius Donnelly to match Milton McCoy, of Ohio fame, on the text-book question, is load enough for one legislature.

—— THE *Massachusetts Teacher* for April has a thoughtful and vigorous article by Supt. Harrington, of New Bedford, on the right proportion of male and female teachers in public schools. He indorses the statement of Supt. Stone, of Springfield, that "the services of both men and women are necessary in shaping the moral and intellectual character of pupils, just as the influence of both father and mother is needed in bringing up a family of children", as the solid philosophy of the matter. He accepts the home as the true analogue of the school, and asserts that as the influence of *both* parents, one man and the other woman, is necessary for complete home training, so both the masculine and feminine elements are needed in the training of the schools. He maintains that the distinctions of sex are as marked in the mental and spiritual constitutions of men and women as in their visible forms, and that their influence as parents or teachers is not and can not be altogether the same; that the one is the complement of the other. He has no doubt that

"certain personal and social aspects of the German nation, not at all to be commended, are largely due to the fact that, from time immemorial, men alone have been the educators of its children", "and", he adds, "they who in our Western communities are now organizing their school systems so that they shall be taught exclusively by women, are unconsciously committing an egregious error."

—— One of our educational exchanges has brought its powers to bear upon the subject of phonics, with this conclusion: "Phonics is good to strengthen the abdominal muscles, and that 's all it 's [its ?] good for." Our acquaintance with phonics is too limited to enable us to speak *ex cathedra* on the subject, but we venture to say that, as a matter of personal experience, we have found a knowledge of the phonic elements of our language very useful as an aid to pronunciation, and drills in phonic analysis have greatly increased the flexibility and accuracy of our vocal powers. What we have found true in our own case, has proved true with many of our pupils, and we believe that our experience is the experience of hundreds of teachers and public speakers who have used phonics intelligently as an aid to orthoepy and in vocal training. We do not know that experience in such a matter ought to weigh against positive assertion, but we submit it, leaving the reader to determine its worth. We ought, perhaps, to add, that we have never spent much time in the phonic analysis of syllables or words, in which the vowel sound is quite obscure or is considerably modified by the following consonant. In such words as *her, earth, term, err, mirror, last, parent*, etc., it is very difficult to give the precise vowel element separately, and we should not require pupils to make the attempt. An accurate knowledge of the vowel element which is modified by the following consonant, greatly assists, however, in determinining the correct pronunciation of the syllable or word. We suppose that the value of phonic analysis will depend much upon the manner in which it is taught and the use made of it. When directed by bowels instead of brains, we judge that its effect will be chiefly "abdominal."

—— It is an interesting and suggestive fact that, of all the replies yet made to Dr. Clarke's "Sex in Education", not one, so far as we know, has been made by a physician of any eminence. Persons with a very limited knowledge of physiology, and entirely ignorant of the causes and effects of female diseases, have not hesitated to deny or question the statements of one of the most eminent and successful physicians in the country. Dr. Clarke's conclusion that "*Identical education of the two sexes is a crime before God and humanity, that physiology protests against and that experience weeps over*", is not to be answered by educators by denying statements of the truth of which the physician is alone a competent judge. We do not see how an experience of ten or twenty years as a teacher of mixed schools can enable any one to say that continuous severe study is not injurious to many girls. So far as we have observed,

teachers as a class know very little of the effect of their school regime on the health of pupils. While we can not accept all of Dr. Clarke's views on co-education, we will not venture to set aside the testimony of physiology when presented by so competent a witness. We prefer to see if the applications made of this testimony are legitimate and the conclusions unavoidable.

—— It is sometimes urged as an objection to public high schools that they are almost exclusively attended by the children of persons who are able to give their children a higher education without public assistance. Were this assumption a fact, we do not see that it would be a valid objection to a public support of high schools. We suppose that there are few public schools in Ohio, of any grade, the majority of whose patrons are not able to pay for their children's schooling, but this fact is not an argument against public education. The existence of the public school does not depend upon the number of its pupils who are paupers. This is one of the exploded ideas of another age. The argument for public schools is strengthened by the fact that they afford the children of the poor free educational advantages, but the argument does not at all depend on the *number* of such poor children enrolled among their pupils. Every child born into free citizenship has an inalienable right to an education and it is the bounden duty of the state to see that this education is provided. But, as a matter of fact, the public high school is *not* almost exclusively attended by the children of the rich. *The majority of the pupils in the public high schools of Ohio would not otherwise be provided with equal or similar educational advantages.* We have had more or less acquaintance with a score of graduating classes in these schools, and we believe that a majority of their members have represented families that could not have paid their tuition in private institutions. Many of them completed the high-school course with great difficulty and with much sacrifice on the part of their parents.

—— In his last annual report, Supt. Hancock, of Cincinnati, recommends that pupils be transferred to the high schools *semi-annually*, instead of annually as now. "The scheme of annual transfers", he says, "does not give elasticity enough to the working of the schools." The course being arranged with reference to the medium pupil, the bright pupils are held back with a loss of relish for study, "while the duller ones are crowded with work beyond their capacity, and pass over the course in a very superficial way." He alludes to the fact that pupils who are not transferred, or, for any reason, are dropped into a lower grade, are compelled to drudge away for a whole year upon the course which they passed over the year before. The result is that they pursue their studies in an indifferent and disheartened manner, or leave school in disgust. In confirmation of his position, he quotes from a report made to the National Educational Association by Supt. Harris, of St. Louis, in which more frequent transfers are ably advocated. We have long questioned the wisdom of annual promotions, with a year's interval between the

successive classes, and we are glad to see indications that the plan will soon be abandoned.

—— If the educational journals were generally a little slow in entering a protest against President Eliot's report at Elmira on a National University, they are not now wanting in emphasis. It took a little time, we suppose, for all to see the bearing of the argument on the question of higher education by the state, but a more careful examination of its scope and character has made evident, what we pointed out at the time, that it undermines not only state colleges, but high schools, and, indeed, our entire system of public education as now organized. We are informed that President Eliot objects to such a sweeping application of his argument, but logic is responsible for its conclusions, whatever may be the intention of him who uses it. If an argument proves too much, it is the fault of the argument, and not of those who follow it to its legitimate and necessary conclusions.

HOW WE MAY SPELL.

We have received the reprint of a correspondence between an "Anxious Inquirer" and the "Literary Editor" of the *Normal Monthly*, respecting the correct spelling of the words *center, theater, traveler, hight, skillful, instill,* and *fulfill*, in which both agree that the established orthography of these words is *centre, theatre, traveller, height, skilful, instil,* and *fulfil*, as given by Worcester. The editor affirms that Webster had no right, as a lexicographer, to change the spelling of words, even with a view of reforming the "confessedly very irregular" orthography of our language. This is a revival of an old question—one that is not likely to be settled by discussion, but by *good usage*, since, according to the dictum of Horace, *use*, not right, is "the law of language." Whether Webster was right or wrong in making his innovations, *their adoption by good writers ends the matter.* It is not worth while to waste ink in questioning the right of any one to change the spelling of a word. The decisive question is, Has the change received the sanction of good usage? Many of Webster's innovations have been approved and others have been rejected by the only authority that can settle such questions. So far as we have examined, the *new* Webster retains the original Websterian spelling only when it has received the sanction of good usage. So far as three of the words in question are concerned, the new Webster gives *center* or *centre, theater* or *theatre, height* or *hight*, the first spelling having the preference, but both being authorized. A writer can take his choice, and, in each case, we prefer the *second* spelling. We dislike to put *high* and *height* in the same sentence. For one we rejoice that so many of Webster's needed changes in English orthography have received the sanction of usage, and that we are not obliged to follow such irregularities as *fulfil, fulfiller, fulfilment, enroll, enroller, enrolment, instill, instiller, in-*

stilment. We gladly accept the authority of Webster and good American usage for *fulfill, fulfillment, enroll, enrollment, instill, instillment*, etc. We like the new Webster because it gives the several authorized spellings of words which are spelled differently, and we hope that the revised Worcester, when it appears, may also recognize American as well as English usage. It seems proper to add, that all the words cited by "Anxious Inquirer", except *theatre* and *traveler*, are found in Worcester's list of "Words of Doubtful or Various Orthography."

COUNTY SCHOOL SUPERVISION.

No one familiar with the condition of the country schools in most of the states will question their need of more intelligent oversight and direction. They are largely in the hands of young and inexperienced teachers, who are deprived of all needed counsel and sympathy, and left at the mercy of insubordinate pupils, ignorant parents, and indifferent or over-officious directors. As a consequence, the schools are broken into fragments of classes, and the instruction is haphazard and superficial. What is needed is some competent authority to introduce some uniformity and system in their classification and management; to instruct teachers in methods of teaching and discipline; to test the results of their labors by vigorous and searching examinations; to set up, in brief, a higher and truer standard of effort, and inspire both teachers and school officers with a more earnest and progressive spirit. The value of such an agency reaching every school district, can not well be overstated. It would revolutionize school instruction.

But how can the schools of the country districts be provided with such efficient direction? There seems to be but one feasible mode, viz: *by organizing an efficient system of county supervision.* This is the only plan that has stood the test of experience. The number of schools entrusted to the oversight of a single officer, is sufficient to require all of his time, and hence the salary paid may be made sufficient to command the requisite qualifications. It is true that a county superintendent can devote but little time comparatively to the personal inspection of each school under his jurisdiction, but, it is to be remembered, it is the *quality*, and not the amount of supervision, which makes it effective.

The above facts have been recognized in a goodly number of states, and the office of county superintendent has been created as a special agency for the improvement of country schools. In several states marked progress has been the result, but in a few states so little has been accomplished that even active friends of the schools have questioned the propriety of continuing the office. The explanation of these facts is evident. The value of this office depends on the manner in which it is administered. It may be so managed as to be valueless and even pernicious. Hence the creation of the office is not enough. *It must be filled by a competent officer.* This is the essential condition. Our schools are

carrying dead weight enough, and are in ruts sufficiently deep, without being subjected to the official peregrinations of fossilized teachers or self-inflated politicians. They need to be vivified by the touch of *living* educators—those possessing high scholastic and professional attainments and imbued with the spirit of educational progress.

To secure competent superintendents, three things are necessary: 1 Their appointment must be entrusted to the school authorities, and not to the political caucus. 2. Their competency, their general and special qualifications for the work entrusted to them, must be carefully inquired into by a competent examining board with power and nerve to reject all unqualified candidates. 3. The salary paid must be adequate to command the necessary talent and experience. These conditions seem to us essential, and a system of county supervision which meets them can but prove a valuable agency for the improvement of our common schools. There may be a difficulty at present in securing so many qualified superintendents, but the demand will, in time, create the necessary supply, and especially if efficient normal agencies are provided.

EDUCATIONAL INTELLIGENCE.

—— When notified that a subscriber has failed to receive any number of this journal due him, we always remail it.

—— The opening paper in this number, credited to President Godman, should be credited to Pres. W. H. Scott, of the Ohio University. We are not responsible for the annoying error.

—— The legislature of California has passed a law forbidding the making of any difference in the salaries of teachers on account of sex. The salaries paid teachers of the same grade must be equal.

—— The circuit court at Kalamazoo, Mich., has decided that taxes can be collected for the support of a school where the higher branches are taught, but the enemies of the public high school have appealed to the Supreme Court, and the question will soon be settled.

—— Rev. R. T. Cross, formerly principal of the Preparatory Department of Oberlin College, has taken charge of a church at Madison, N. Y. We are happy to add that he will continue his series of practical contributions to this journal. He knows the wants of young teachers.

—— Boards of Education or other parties wishing to employ superintendents, teachers for any position, or teachers of special branches, will do well to apply to this office. We can put them in communication with superintendents and teachers of successful experience who desire new positions. We call attention to several cards in our advertising pages.

—— Austria has 59 well-equipped normal schools, taught by 581 teachers, and attended by 3,500 pupils; Prussia has 62 normal schools, with 3,614 pupils; Saxony has 18 normal schools; Belgium, 30; Wurtemberg, 10; and Bavaria, 10. They evidently do not believe in Europe that teaching "comes by nature."

—— The *Kansas Educational Journal* states there are not ten educators in Kansas in favor of the adoption of a uniform series of text-books for the public schools throughout the state. It adds that "the educational world is against the measure and for reasons so plain that it is useless to state them." It is condemned as "neither practicable nor desirable."

—— The Boston School Committee has decided that girls under the age of fifteen years shall not hereafter be admitted to the high school, and that the highest grades of the girls' grammar schools shall occupy rooms in the lower stories of the school buildings. This wise action is supposed to be the result of Dr. Clarke's recent book on "Sex in Education."

—— We learn from the *Massachusetts Teacher* that the common council of Boston has abolished the office of city superintendent of schools. An appeal has been made to the legislature to put the appointment of the superintendent in the hands of the school committee where it belongs, but we have not learned the result. It will be a mystery, as the *Teacher* states, if the foremost city in the country in public education deliberately takes the back seat.

—— Ten of the outgoing county school superintendents of Iowa are women, and the *School Journal* states that they have performed their official duties in an efficient manner. Two of them, Mrs. Dakin, of Cerro Gordo, and Miss Fulton, of Monona, were candidates for reëlection, distancing their male competitors. We are not informed why eight of the ten voluntarily retire from office. Women are eligible to any school office in Iowa.

—— Prof. Alexander Agassiz, the new director of the Anderson School of Natural History, in place of his father deceased, has made an appeal to the states for an appropriation in support of this institution. Any state giving $5,000 outright or $350 a year will be entitled annually to the admission of "two teachers selected for their aptitude in natural history." This school was attended last year by students from eleven states, and it will become in fact, if not in name, a national institution for the training of teachers.

—— The State of New York has two independent and often conflicting heads to its school system—the State Department of Public Instruction and the Board of Regents. A bill has been introduced into the legislature to abolish the office of State Superintendent, and put school affairs into the hands of the Board of Regents; and another bill proposes to abolish the Board of Regents, and transfer its duties to the State Department of Public Instruction. Meanwhile, the legislature has elected Mr.

Neil Gilmour, of Saratoga, State Superintendent of Public Instruction, as successor to the present incumbent, Hon. Abram B. Weaver. It is generally conceded, we believe, that Mr. Weaver has been an efficient and able officer.

—— The Ohio Constitutional Convention has adopted the educational article of the present constitution, with the added provision that women having the qualifications of electors except as to sex, may hold any office under the school laws except the office of State Commissioner of Common Schools. The proposition to give women the right of suffrage received 49 of the 90 votes cast, being but four less than the requisite majority. To make women eligible to school offices and at the same time deny them the right to vote for school officers seems somewhat inconsistent, but consistency is not a constitutional requirement. We learn that the proposition virtually to abolish high schools received but *seven* votes, and that the proposition to divide the school fund between religious denominations received only the vote of the mover.

—— The legislature of Iowa has passed a law making provision for county normal institutes, to be held annually under the direction of the county superintendent. The expenses are to be defrayed from a fund raised by a fee of one dollar for each certificate, a registration fee of one dollar, the state appropriation for institutes, and such additional sum as the board of supervisors may deem necessary and appropriate. This puts the institute system of Iowa on a good financial basis, and county superintendents will hereafter have sufficient money to employ competent instructors.——The movement in the legislature to abolish the office of county school superintendent has steadily lost strength, and, at our last advices, the friends of the office believed that the bill would be defeated.

—— The first annual report of the public schools of West Des Moines, Iowa, confirms the opinion of an intelligent correspondent, that they rank among the very best schools in the West. They are under the direction of Mr. J. H. Thompson, formerly of Senecaville, Ohio, a progressive and skillful teacher and a very successful superintendent. The report shows that he has paid special attention to primary instruction. The course of study is well arranged, and the methods of teaching adopted are in harmony with sound principles. We have read with interest the views presented on the subjects of discipline and moral instruction. The entire report is a credit to the superintendent's Buckeye training.

—— The new observatory at Cincinnati, the corner-stone of which was laid Aug. 28, 1873, is to be seventy-one feet by fifty-six, with an elevation of sixty feet, and is to be built of brick, trimmed with freestone. The pier of the Munich Equatorial, to be built of solid brick, with like capping, is to be thirty-six feet high and seventeen feet in diameter, and the revolving turret dome will add half a story. The site is on Mount Lookout, one of the highest points in Hamilton county. It will

be free from the smoke and heated air of furnaces, which prevented accurate observations at the old site on Mount Adams. A tripartite agreement between the Longworth heirs, the Astronomical Society, and the city permitted the sale of the old site, and pledges the city to maintain the observatory in connection with the Cincinnati University, for original investigations as well as educational uses. Mr. John Kilgour, of Cincinnati, donated the site, and also made a liberal donation of money. We gather the above facts from *Harper's Magazine* for March.

—— THE Cherokee Nation now numbers 60,000. Its superintendent of schools report that about 2,300 children attend schools; that the schools are in session nine months annually, and that all the English branches are taught, including geometry, rhetoric, etc.; that there are forty-four native teachers and twenty-two pale faces; that they have one orphans' school, with ninety inmates; one female high school, presided over by a teacher from Mt. Holyoke, Mass.; and one Moravian missionary school. These schools have been supported by the United States for thirty-five years past, or since their formation, and about $50,000 is now appropriated by Congress annually to sustain them. The superintendent thinks that the Nation will in time support the schools without aid from Government.—*Ilion Citizen.*

—— WE are indebted to Mr. John B. Sherwood, of Attica, Ind., for an interesting account of a meeting of the teachers' association of Fountain county, held at Attica, April 9th and 10th. There was a good attendance, and it is believed that the meeting has given a new impetus to school progress in the county. Mr. W. A. Bell, editor of the *Indiana School Journal*, favored the association with an interesting lecture. Meetings are hereafter to be held semi-annually.——A correspondent favors us with a report of a county teachers' institute, held at Parkersburg, West Va., the first week of April. Prof. McCord, of the Curry Normal Institute, Pittsburg, Pa., the only instructor from abroad, gave a valuable series of lessons. There was much enthusiasm. The school system of the state is making encouraging progress.

——THE success of the Kindergarten experiment in St. Louis has induced Supt. Harris to recommend the opening of at least two more in September next. To meet the difficulty of expense, he suggest the employment of only one trained teacher at a salary of $800, with two assistants who may be learners, for each Kindergarten. He thinks that for some time to come assistants may be obtained, who will give their services for the advantage of the training. By receiving one set of pupils in the morning and another set in the afternoon, the cost of tuition may be reduced to $8 to $12 a pupil. "The chief ground of this recommendation", he adds, "is the importance of providing a suitable education for children who, living in the parts of the city where there are no yards or suitable playroom, are necessarily subjected to the evil influences of the street without a sufficient antidote."

RHODE ISLAND.—The annual meeting of the Rhode Island Institute of Instruction, held in Providence, Jan. 22d, 23d, and 24th, crowded Music Hall with teachers and citizens. We judge from the *Schoolmaster's* report of the proceedings, that the papers and discussions were even more suggestive and practical than those we had the pleasure of hearing at the last year's meeting, and that the exercises generally were very interesting. The forenoon of the first day was devoted to visiting the schools of the city and the state normal school. In the afternoon the Institute met in two departments—higher instruction and elementary instruction. In the former, Mr. David W. Hoyt read a paper on "The Relation of the Teacher to Modern Progress", and Prof. J. L. Lincoln, one on Preparatory Classical Studies; and in the latter, papers were read by Prof. J. C. Greenough, on "Primary Reading"; by Miss Mary A. Riley, on "Elementary Geography"; by Miss S. C. Bancroft, on "Early Steps in Language." In the evening, the Institute was addressed by Hon. John Eaton, United States Commissioner of Education. The exercises of the second day consisted of two lectures on the teaching of reading by Prof. Mark Bailey, a paper by Prof. Greenough on "The Use of Text-Books", and a paper by Mr. L. W. Russell on the question, "How can our schools be improved?" Friday evening's session was beyond precedent in the crowd that failed to gain admission to the densely packed hall. The exercises consisted of brief addresses, readings, and music. The session on Saturday morning was chiefly devoted to business, relieved by brief addresses. The management of the *Rhode Island Schoolmaster* was heartily and justly commended, and we learn from its report that "THE NATIONAL TEACHER, of Ohio, was strongly recommended"—an appreciation attested by a good list of subscriptions, sent us by the business manager of the *Schoolmaster*. President Merrick Lyon is entitled to much credit for the marked success of the meeting.

——THE English and Classical High School, Providence, R I., is the largest, most thoroughly classified, and best taught and conducted private institution of its class that we have ever visited. It is divided into four departments—Preparatory, Grammar School, English and Scientific, and Classical—and the course of instruction begins with the rudiments and carries the pupils forward until they are prepared for college or for the higher business pursuits. Pupils are promoted from grade to grade by as complete a system as is used in public graded schools. The aim in each grade and department is to prepare the pupil thoroughly for the next, and, to this end, each teacher has charge of but two classes of pupils. The school is conducted by Messrs. Wm. A. Mowry and Charles B. Goff, the associate principals, and two of the most successful teachers in New England. A few years since, Mr. Mowry left the Providence High School on account of the low salary paid him. He has since built up a flourishing institution, and accumulated a handsome property.

ATLANTA, GA.—We gave last year a brief account of the organization of the public schools of this city, and now we have the pleasure of looking over the record of their progress the second year of their history. We learn from Supt. Mallon's excellent report, that the schools opened

with full numbers at the beginning of the year, and that they improved constantly and, in some directions, rapidly until its close. The number of pupils enrolled was 3,594, with an average daily attendance of 2,268. The two high schools enrolled 310 pupils, and the colored schools, 1,153. The whole number of teachers employed was 57. The amount paid teachers was $40,851, and the total expenditures were $49,956.04. The average cost per pupil for the year was $18.29, against $18.32 the first year. The superintendent believes it will prove false economy to endeavor to hold this cost at much less than $20 per annum. "It can not be done", he says, "except at the sacrifice of the interests of the schools. Either the salaries of teachers must be made so low that teachers of proper qualifications can not be retained, or the number of scholars to the teacher must be made so great as to forbid effective teaching; or, still further, suitable apparatus and other facilities for instruction must be denied to the schools." Satisfactory progress in classification and instruction is reported, but the schools have not reached a high standard in discipline. The teachers are making earnest efforts to remove this defect. The course of study is well arranged. The report of the president of the board, ex-Gov. Joseph E. Brown, is an able defence of the public school system. He discusses, at some length, the religious question, taking a decided position against the compulsory reading of the Bible in the schools, and also against a division of the school fund between Jews, Catholics, and Protestants, as some have proposed. He believes that public schools should be secular.

OHIO.—The General Assembly passed no school law of general interest, two or three unimportant amendments to the new school act and a few local laws constituting the school legislation of the session. The House bill relating to separate schools for colored youth, is postponed to the next session. Mr. Case's bill giving boards of education authority to purchase school books and sell them without profit, was defeated in the Senate. The General Assembly deserves special credit for passing a law providing for the union of not more than four counties for the establishment of Children's Homes, for the homeless little ones now in our county infirmaries, and subject to their corrupting influences. We hope that the authority granted by this excellent law, will be used throughout the state. —— The report of the State Commissioner of Common Schools, for the year ending Aug. 31st, 1873, is one of the best reports yet issued by the Department. A valuable feature is a digest of the new school law, with concise explanations of several of its more important provisions.——Miss Maria Parsons, principal of the Akron High School, resigned at the close of the last term, on accout of failing health. She has taught for seventeen years without the loss of a week. Miss Emma Cutler, of College Hill, is her successor. Miss E. A. Herdman, for six years principal of the senior grammar school, has also resigned her position on account of failing health.

CINCINNATI.—The report of the public schools for the year ending June 30, 1873, is somewhat late in its appearance. The report of President Goss is almost exclusively devoted to financial matters, and hence

contains little of general interest. The new school law makes the board a body corporate, with power to levy taxes for school purposes, purchase property, etc.—a power heretofore exercised by the city council. The board and the city are to be congratulated on the completion of the new public library building—"the finest on the continent." Supt. Hancock's report is a full and satisfactory exhibit of the condition and progress of the schools. The statistical tables, compared with those of the previous year, show an increase of 48 in enrollment, and of 461 in average daily attendance—a fact denoting, as Supt. Hancock claims, a healthy condition of the schools. Of the 26,795 pupils registered 20,323, or 75.8 per cent, were remaining in the schools at the close of the year. We believe that there is no large city in the country that secures as regular attendance as Cincinnati, but it has never been able to claim special credit for the per cent of its youth of school age annually enrolled in the schools. The number of pupils enrolled in the normal school and the two high schools was 3.5 per cent of the whole number enrolled in the schools—a slight increase. Seventy-five per cent of all the pupils enrolled were under twelve years of age when they entered school, and less than nine per cent were above fourteeen years of age. The whole number of teachers employed, including special teachers, was 513. The night schools of the past winter were of unusual excellence, but the small number of young men and young women of more advanced scholarship in attendance is regretted. It is recommended that the night school of the arts and sciences, so successful before the war, be reestablished. All the schools have made good progress in vocal music, penmanship, drawing, and composition. Drawing from solids was begun in the normal schooi, and its introduction into the high schools and the upper classes of the intermediate schools is recommended. Supt. Hancock discusses with his usual good sense and ability several topics of practical interest, including absenteeism, expulsion from schools, normal training, methods of instruction, courses of study for the high schools, and the transfer of pupils. To his views on the last named topic we have referred in another place, and we hope, in due time, to refer to his remarks on several other topics. The reports of the principals of the normal school and high schools show that these institutions are doing an excellent work. The report of the former librarian is evidenc of the ability and fidelity with which the public library was managed.

PRUSSIA.—The following studies are obligatory in the elementary schools: Religion, the mother-tongue, including writing and grammar, arithmetic, practical elementary geometry, geography, history, the elements of natural history, the elements of physics, drawing, singing, gymnastics, and, for girls, needlework. To each of the last four branches the pupils of the upper classes are required to give two hours weekly. While this schedule is not as great as the course pursued in the public schools of cities and towns in America, it will seem quite formidable to the teachers of ungraded schools. The instruction in Prussia is chiefly oral, and fewer details are taught than in American schools.

BOOK NOTICES.

MANUAL OF THE CONSTITUTION OF THE UNITED STATES. Designed for the Instruction of American Youth in the Duties, Obligations, and Rights of Citizenship. By ISRAEL WARD ANDREWS, D.D., President of Marietta College. Cincinnati and New York: Wilson, Hinkle & Co.

This is the best manual on the Constitution of the United States for school use that we have ever seen. It contains not only a clear exposition of the principles of the Constitution, but also a summary of the legislative provisions in which they have been embodied. It is at once a commentary and a history, and the history is, of itself, the very best commentary. Many of the provisions of the Constitution can only be understood when studied in the light of their origin and development through the national life. History teaches by example. But the historic information embodied in the work has great value, independent of the light which it sheds upon the meaning of the Constitution. It is precisely such knowledge of the government as every intelligent citizen should possess.

The plan of the work is also excellent. A valuable chapter on the object, origin, and nature of government, is followed by a concise history of the Colonial Governments, their union in the Revolution, the Articles of Confederation, and the adoption of the Constitution. The exposition of the Constitution, filling 138 pages, is followed by chapters on its ratification by the several states; the admission of new states; the organization of the several departments of the government at different periods in its history; and the state governments.

The manual is evidently the result of many years of careful research, and it will be welcomed not only by teachers, but also by all citizens who have felt the need of such a work for consultation and reference. Its authorship is a guarantee of its accuracy.

HOW TO TEACH. A Manual of Methods for a Graded Course of Instruction. For the Use of Teachers. By HENRY KIDDLE, A.M., City Superintendent of Public Instruction, New York; THOMAS F. HARRISON, First Assistant Superintendent of Grammar Schools, New York; and N. A. CALKINS, First Assistant Superintendent of Primary Schools, New York. New York: J. W. Schermerhorn & Co.

A fuller title of this manual would be "What to Teach and How to Teach." It contains an extended syllabus of a course of graded instruction, divided into ten grades, each accompanied by practical directions respecting the best methods of teaching the several subjects, with suggestions relative to discipline and school management. The system of instruction embodied is essentially that which has been in use in the schools of New York City for several years, only differing from it in the number of grades, but corresponding precisely in the order of the studies. The instructions accompanying the syllabus is, we judge, the cream of the course given by the authors in the Saturday Normal School. These facts are sufficient to show that the work presents not mere theory, but the *actual practice* of the largest corps of teachers in the country. We confess, however, that we suspect that a mistake has been made in the *time*

allowed for the completion of the course. It is enough to make an old-time teacher's head swim to contemplate the subjects here prescribed for children to learn in less than *seven* years, or before they are *thirteen* years of age. It is true that it is not expected that these subjects will be mastered, but the amount to be attempted, as indicated by the syllabus and the accompanying instructions, is quite appalling. The course of object lessons for the primary grades covers the elements of nearly all the natural sciences, and the grammar-school course adds to the common branches drawing, United States history, outlines of ancient and modern history, book-keeping, algebra, plane geometry, and "Elementary Science", including zoölogy, mineralogy, physiology, and hygiene, natural philosophy, astronomy, and chemistry! We do not find vocal music in either course—a singular omission. It is no wonder that thoughtful educators are fearing that our graded courses of instruction may break down from their own increasing weight, and that many, who are not teachers, suspect that the instruction in our schools is very superficial. We are satisfied that both our high schools and our lower schools are attempting too much. With this caveat, we can commend "*How to Teach*" as the most valuable and helpful manual for teachers yet published in this country.

A SCHOOL MANUAL OF ENGLISH ETYMOLOGY, and Text-book of Derivatives, Prefixes, and Suffixes. With Numerous Exercises for the Use of Schools. By EPES SARGENT, Author of "The Etymological Reader", etc. Philadelphia: J. H. Butler & Co.

This work possesses many excellent features. Its lists of prefixes and suffixes and also of Latin and Greek derivatives are very full. The Greek derivatives are put in two divisions, one including those that yield a large number of derivatives and the other those that yield only one or two. The Latin derivatives are divided into three divisions, the third being made up of such root-words as are represented by monosyllables in English—a new feature. The changes of meaning which words have undergone in passing from one language to another, are carefully indicated in defining them, thus guarding the pupil against the error of depending on the meaning of a root for the meaning of a derivative. But the feature that will specially commend the work to practical teachers, is its admirable and numerous exercises for practice and drill.

A MANUAL OF GESTURE; Embracing a Complete System of Notation, together with the Principles of Interpretation and Selections for Practice. By ALBERT M. BASCOM, A.M., Professor of Elocution. Chicago: S. C. Griggs & Co.

The student of oratory who adds this exhaustive and masterly treatise on Gesture to Dr. Rush's "Philosophy of the Human Voice" and Prof. William Russell's "Orthophony, or Vocal Culture", will be well equipped for a thorough study of the subject. The author here gives the fundamental principles which underlie the art of gesture, and, at the same time, he has presented the art itself in a very complete and practical manner. The illustrations and examples for practice are nu-

merous, and the selections are choice and varied. The work is based on Austin's "Chironomia", a standard and valuable English treatise, and it is favored with the hearty indorsement of the late Professor William Russell, the most eminent of American elocutionists.

—— We will furnish The National Teacher and *Littell's Living Age*, one year each, for $8.00; the Teacher and *Lippincott's Magazine* for $4.00; the Teacher and *St. Nicholas* for $3.75; the Teacher and the *College Courant* for $3.50; the Teacher and Northrop's "Education Abroad" for $2.50; and for $2.50 the Teacher and the *R. I. Schoolmaster*, or the *N. Y. State Educational Journal*, or *Home and School*, or *National Normal*, or the *Nebraska Teacher*, or the *Tennessee School Journal*, or any other Educational Journal whose price is $1.50.

—— The price of the new Botanical Charts, published by D. Appleton & Co., New York, is $18. See their advertisement on the third page of cover.

NEW BOOKS RECEIVED.

Manual of the Constitution of the United States. By Israel Ward Andrews, D.D., President of Marietta College. Cincinnati and New York: Wilson, Hinkle & Co. Price of School Edition, $1.60.

A Progressive and Practical Method for the Study of the French Language. By F. Duffet, Professor of Languages; Member of the "Association Polytechnique", Paris. Part First. Cincinnati and New York: Wilson, Hinkle & Co. Price, $1.00.

School Composition: Being Advanced Language Lessons for Grammar Schools. By Prof. William Swinton, A.M., Author of "Language Primer", "Language Lessons", "Progressive Grammar", etc. New York: Harper & Brothers. Price, 50 cts.

No Sex in Education: Or, An Equal Chance for Both Girls and Boys. Being a Review of Dr. E. H. Clarke's "Sex in Education." By Mrs. E. B. Duffey, Author of "What Women Should Know", etc. Price, $1.00. Philadelphia: J. M. Stoddart & Co.

Record of Mr. Alcott's School, Exemplifying the Principles and Methods of Moral Culture. Third Edition, Revised. By Miss E. P. Peabody. Boston: Roberts Brothers. 1874. Price, $1.50.

The National Temperance Orator. A New and Choice Collection of Prose and Poetical Articles and Selections for Public Readings, Addresses, and Recitations, together with a Series of Dialogues, designed for the Use of All Temperance Workers and Speakers, Divisions, Lodges, Juvenile Temperance Societies, Schools, etc., etc. By Miss L. Penney. New York: The National Temperance Society and Publication House. Price, $1.00

Model Dialogues: A New and Choice Collection of Original Dialogues, Tableaux, etc., for School Exhibitions, Literary Societies, Lyceums, Anniversaries, and Commencements, The Holidays, Church, Sunday School, and Sociable Gatherings, Temperance Meetings, and Home Amusement. Compiled by William M. Clark, Editor of "Schoolday Magazine." Philadelphia: J. W. Daughaday & Co. Price, $1.50.

Annual Report of the State Board of Education of Maryland. 1873. Annapolis: S. S. Mills & L. F. Colton, Printers.

The American Primer. By Wm. J. Davis. Louisville: John P. Morton & Co.

SCHOOL REPORTS AND CATALOGUES.

Report of the School Committee of Springfield, Mass. 1873. A. P. Stone, Supt.

Annual Report of the Superintendent of Public Schools of New York City. Henry Kiddle, Supt.

Annual Report of the Public Schools of Omaha, Neb. 1873. A. F. Nightingale, Supt.

Manual of the Sidney Union Schools, Ohio. 1873. R. S. Page, Supt.

Fifth Annual Report of the State Superintendent of Public Instruction of Nebraska. 1873. J. M. McKenzie, Supt.

Boston University-Year Book. Edited by the University Council. Vol. I. Boston: H. O. Houghton & Co. 1874,

Annual Catalogue of Lane Theological Seminary, Cincinnati, O. 1873–74.

Catalogue of Kenyon College, Gambier, Ohio, for the Year, 1873–74. E. T. Tappan, LL.D., President.

NATIONAL EDUCATIONAL ASSOCIATION. The Volume of Proceedings for 1873, neatly bound in muslin, is sent, postpaid, at the low Price of $1.75. Address: Prof. S. H. White, Peoria, Ill.

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WANTED.—A young lady, who has taught several years, and who was formerly a student in New Jersey State Normal School, desires a situation as a teacher in the West. She can give satisfactory testimonials as to scholarship and success in teaching. Address: NATIONAL TEACHER, Columbus, O.

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THE

NATIONAL TEACHER:

A MONTHLY EDUCATIONAL JOURNAL.

Vol. IV. JUNE, 1874. No. 6.

METHODS OF EXAMINATION.*

(*Concluded.*)

In the written examination, questions that have been previously prepared, are presented to students either on the blackboard or on slips of paper. To these questions they are required to write out answers, which they present to the examiner for subsequent examination. The advantages of this method are numerous and obvious. In point of thoroughness it is vastly better than the oral method. Each student is under examination during the whole time allowed for the class. Work enough may be assigned to require two or three hours occupied in diligent writing.

Questions may be more comprehensive or may take a wider range. Of course an examiner may trifle. Easy questions may be asked, or difficult ones may be asked at hazard. But the written method presents the opportunity for a close and decisive examination. A student can hardly write even for an hour in answer to well-selected questions, without revealing both his merits and his deficiences.

It is also favorable to thoroughness that the student is cut off from communication with the examiner. The questions should be clearly expressed, and then the student should be left to himself, to put forth his own strength and display his own knowledge without help or suggestion from any one. Every interference leaves it uncertain how much he can do

* A paper read before the Ohio College Association, at Westerville, O., Dec. 30, 1873, by Pres. W. H. Scott, of the Ohio University.

independently, and complicates the difficulty of making up his grade. As the same amount of help can not be afforded to all, the excess afforded to one is an injustice to others. The student is encouraged to look for help, and thus his spirit of self-dependence is impaired. Nor is the danger all on the side of the student. The examiner is often tempted to yield more an more, and is drawn by degrees into explanations which at first he would have utterly refused to make. An oral examination is apt to fall more or less into conversational form. Sometimes the student turns examiner, and the value of the examination is almost, if not entirely, destroyed. In this respect, the advantage of the written method must be evident. The questions may be carefully prepared and submitted for revision to another member of the faculty. Being written, if they are not fully comprehended at first, they can be considered more attentively. Hence there need be no real occasion for explanations on the part of the examiner. The student may be thrown upon his own resources, and the work he does will be his own work.

This method is equal. The same work is required of all. All have pursued the same study under the same circumstances, and all are now subjected to the same test.

Still another advantage of this method is, that it allows time for reflection. An answer may be revised, inaccuracies may be corrected, omissions supplied, redundancies removed, and the whole cast into a form at once concise and complete. If the erudite scholar finds it desirable to study with care the language in which he conveys truth, how much more is it desirable for one to whom the clear and accurate expression of thought has not yet become habitual. We all desire to be judged, not by our hasty and unpremeditated utterances, but by what we have said or written with thoughtful deliberation. So the student should be judged, not by what he can speak trippingly on the tongue, but by what he knows well enough to state in precise language when he has time to summon the whole energy of his mind to the task. Too much deliberation may be guarded against by requiring the work assigned to be done within a given time.

At the close of such an examination, the examiner has before him the material from which to form a definite conclusion respecting the attainments of each member of the class. He has ample time also to weigh critically what the class has produced, to compare each answer with the question which called it forth,

and the work of each member of the class with that of the others. If a student be dissatisfied with the estimate of the examiner, it will be easy to go over the work with him and point out to him its defects.

But this method of examination, like all plans of human device, is in some respects imperfect. It excludes visitors. This is not a slight objection; for no young men are so sensitive as to their reputation as the young men of our colleges. Nothing, therefore, is a stronger stimulus to earnest preparation than the expectation that interested and critical spectators will be present at the examination. This objection may be removed, partially at least, by announcing that the papers of the class will be open to the inspection of all who may desire to see them.

Perhaps the most formidable objection to written examinations is, that they afford peculiar facilities for deception. Unprincipled students may filch from each other's papers, or communicate by writing, or even make use of text-books during the progress of the examination. Vigilance and tact, however, will usually, if not always, prevent the success of such attempts. The examiner should leave the least possible opportunity for deception, fulfilling for the students even against his will, the prayer, "Lead us not into temptation." He should sit where he can command a view of the entire class; and he should attach such penalties to this misdemeanor as will make it very unprofitable to be guilty of it.

Notwithstanding these and other objections that may be sug. gested, I am fully of the opinion that in a college the cases are few indeed, in which examinations should not be conducted in writing.

I think it will be found that we are in need of a reform in respect to the frequency of examinations. Not only should the student understand that on the lesson which he studies to-day is he liable to a general review on any subsequent day, but stated examinations should be held much oftener than they are in most institutions. I would by no means dispense with the final examination at the close of the term; but in addition to this there ought to be examinations at least as often as once a month. If they were held once a week in classes that recite daily, it would be still better.

Frequent examinations serve to keep the student alive to his duty. Students are not exempt from that common frailty of

human nature through which men give way to present temptation at the sacrifice of future good. For an examination from which one is separated by so wide an interval as three months, he always seems to have abundant time to prepare. He may be indolent to-day with the delusive purpose of being studious to-morrow. To-morrow becomes to-day; and the time for hard study is still kept a day in the future. But an examination that is only a week ahead, one feels to be imminent. It is, therefore, an immediate and constant incentive to exertion.

The frequent recurrence of examinations counteracts the tendency of which all students are conscious, to study for recitation only. The majority of students suffer their memories to acquire the trick of retaining a lesson just long enough to recite it. They use the memory like a gun, loading it for a particular purpose, and, when the appointed hour arrives, discharging it,—sometimes, forsooth, with a tremendous reaction. Then, after a little time to cool, their empty weapon is ready for another charge. In other words, they cram, which every teacher knows to be one of the most pernicious habits into which it is possible to fall. Let the student know, however, that at the end of the week he will be called on to account for what he learns to-day, and he will soon drill his memory to a more careful retention of what is committed to its keeping. As a means of promoting the same object, it is well for advanced classes to carry on one study each term without recitation, subject only to frequent written examinations.

This plan secures also the benefits of a review. It enables the student to traverse again the ground over which has recently gone, discovering what had previously escaped his attention, surveying more carefully what he had observed before, and fixing the character and relations of each part more definitely in his mind. The value of this review is greatly enhanced by being made in writing. Nowhere is the importance of the pen as an aid to the faculties more apparent than here.

It devolves upon teachers, and especially the teachers in our colleges, to vindicate the right of the cause of education to the position to which it has been exalted, and to strengthen its hold upon the popular mind. Especially should no proper agency be neglected to render the young men and young women who go out from our colleges, worthy representatives of education; and, in accomplishing this, the examination, which may be made so constant and so potent in its influence, and so de-

cided in its results, ought to be used with such judicious care as to do its full part in the acquisition of knowledge, in the discipline of the intellect, in the development of the character, and in the perfection of manhood and womanhood.

THE ART OF EXPRESSION.—I.

The conditions of a nervous and beautiful speech are always closely connected with what is best and most bracing in one's life and culture. Show me a man with a pure, vigorous, and elevated speech, and I will be answerable for his wisdom. Even the meanings which one puts into words, especially the rich single words of the language, will test adequately enough his mental power and growth. He who uses words in a noble and expanded sense, has a brain correspondingly noble and expanded.

True and adequate knowledge is the foundation of a true and adequate expression. This, while true *a priori*, is capable of illustrious exemplification.

It was once a marvel to me how some of the members of the British Scientific Association, whose lives have been so purely devoted to science, became masters of so perspicuous and noble a speech. The marvel is now less a marvel. Doubtless these men know the best books and the best that is said in them. They, of course, also use this knowledge as men of rare intellectual endowments must use it. Guided by a sure perception, they know what to press and what to reject; what may become a part of their life and work, and what may not. But one must search further before he rightly understands the pure vigor of that clear and bracing speech.

1. Noble knowledge is apt to find for itself a noble expression.

2. Those rare qualities of mind and character which these men put into their work, that work has in part at least bestowed.

Tyndall, for instance, has fine native gifts, but not to these gifts alone, do we owe the high and pleasant hours we have spent with him. Those fine exhilarating qualities which make him so admirable a companion, are owing, in part at least, to the reflex influence of noble knowledge and noble work.

But the fact that vigorous and stimulating knowledge will clothe itself in vigorous and stimulating language, is not alone exemplified by the physical investigation, adequate and illustrious as his example undoubtedly is. What Prof. Lewes says of Goethe, that "he was not satisfied with definitions", and "that his soul hungered for facts", is true of every literary man who has given to the world any beautiful or memorable work. The words of Milton and Dante hit the mark and cleave to the memory, because they are vital with thought and knowledge.

Let us put down, then, as the first condition of effective expression, *clearness of vision.* This implies—

1. A knowledge of facts.
2. Delicacy and sureness of perception.

The natural steps in the evolution of a noble individual speech may be expressed thus:

1. It is fresh and vigorous.
2. Preserving its freshness and vigor, it becomes sound and correct.
3. Preserving all other noble qualities, it becomes eloquent, literary, or poetic.

Vigor, then,—the faculty of putting a solid and sincere thought in solid and sincere words, itself a noble and decisive sort of grace,—this, and not correctness or elegance, is the first thing to be gained. For the lack of this one quality, we have much fluency and flippancy in the world, and but little really great and select speech. In fact, a certain refinement without power, is the most unpromising thing in modern life and letters.

Just here, too, is a profound error in existing school methods. In elementary language-lessons, in the study of grammatical and rhetorical forms, it seems to be forgotten that fresh and noble knowledge is the first condition of fresh and noble expression. The study of words is elevated above the study of facts; the beauty of the thing symbolized is lost in the supposed beauty of the symbol. But the direct observation of facts is vital. Without it we can have neither a wholesome and bracing speech nor wholesome and bracing lives. Facility and perhaps a certain felicity of expression may be gained from the formal study of words, but it will lack power, which is after all the highest grace of the best speech.

But it is time to condense the substance of this article into a few clear and definite hints:

1. Speech is only noble and bracing as it represents in some high sense a noble and bracing culture. Facility, gained at the expense of power, is not worth the price paid for it. Pages of vapidness will not compensate for a few noble and smiting words. He is no writer who can not crowd the essence of all his culture into the meaning of a single word.

2. For the purposes of expression alone, however closely it may be connected with what is best in culture in other ways, the child should be educated into a trained observer, and taught to walk trustingly with nature. The natural history sciences especially should be cultivated in a truer, more alert, and, I may add, more heroic way.

3. Language lessons and composition exercises should represent always the pupil's freshest and best knowledge. Special and pictorial terms, and, indeed, all, or next to all, the conditions of the effective sentence, are at the command of him who is rightly stimulated by a fresh and expansive thought. The nobly seeing eye ministers always to the rightly speaking tongue. This is only saying in another way, that the deepest principle of art is life and truth.

4. Conversation for a definite purpose, and as a means of noble discipline, has always been employed by men of high intellect. It should be used in this Socratic way in every school where true and notable thought is deemed an element of true and notable expression.

E. S. Cox.

EXPERIMENTAL NOTES.

It is proposed to furnish under this head, from time to time, brief notes on the preparation and performance of simple experiments in natural philosophy, and especially on the construction of efficient and cheap apparatus, useful in the illustration of an elementary course in physics, such as is now being introduced into so many of our public schools. No special order will be followed, and the illustrations will be drawn from any available source, but nothing will be recommenned which has not been tested in the laboratory and found to succeed. Some methods will be given not generally found in the text-

books in common use, and an attempt will be made to make their description clear enough to enable any body to succeed in their repetition.

It need not be stated that the design is to supply a want existing among teachers almost entirely without apparatus and appliances, yet full of a desire to accomplish something in this direction. Of the existence of this want and this desire, the writer has had many evidences in the way of interesting letters of inquiry concerning what can best be done with a few dollars. Few persons are aware of what may be done with a few cents, if expended judiciously. It is hoped that these "Notes" may be valuable as hints to some of the many earnest teachers engaged in this sort of instruction.

I. A Simple and Cheap Battery.

Take a shallow dish, a common saucer will do, a piece of sheet zinc two or three inches square, such as is used under stoves will answer very well, and a piece of lead as near the same size as may be. If sheet lead can not be obtained, it may be made by melting or by hammering an ordinary bar. Fasten a few feet of wire to each of the metals,—copper wire is best, if it can be obtained, and should be a millimetre or more in diameter. It can be fastened by simply punching holes through the zinc and the lead plates near one of the edges. Put the lead in the saucer and the zinc on top of it, separated from it, however, by a piece of blotting paper a little larger than either of the plates. Cover the whole by pouring in the dish a solution of sulphate of copper or blue vitriol in water. This little battery costs but a few cents. A single cell made as described has sufficient power to run two telegraph sounders. The current, if passed near a suspended magnetic needle, will cause it to deviate from the magnetic meridian, and, in fact, very many of the most important laws of dynamic electricity may be demonstrated by its aid. It will continue in constant action for from 24 to 48 hours, and, of course, its power may be increased by connecting several cells in series. Copper wire for connecting purposes can generally be purchased in any hardware store or tin shop. A notion seems to prevail extensively that, for electrical purposes, nothing but insulated wire can be well used. This is a great mistake, as, in general, insulated wire is only necessary in the manufacture of electro-magnets, or in cases in which the wire is to be coiled upon itself or

some other metal. Even in these cases it is not an absolute necessity, as will be shown at some future time.

II. An Electroscope.

Different forms of the electroscope are described in most text-books, but teachers rarely attempt their construction. Nothing is more simple, and few instruments will afford more facilities for interesting and profitable experiment and investigation in the hands of the pupil. An excellent gold leaf electroscope, recently constructed by a pupil in the laboratory of this Institution, was made as follows: A common cylindrical lamp chimney had its ends fitted into grooves in two pieces of wood, one inch in thickness and about three inches square. One of these served as the base of the instrument. Through the centre of the other, which was the top, was passed a straight brass wire four or five inches in length. The glass cylinder is fixed firmly by means of sealing wax to the base, the top or cap piece being adjusted so as to be easily removed. The wire passing through this cap is also adjustable as to height. To the lower extremity of this wire is fastened, by means of a little mucilage, two strips of gold leaf about one-third of an inch wide and nearly two inches long. Their lower ends must, of course, hang freely, so as to stand apart when electrified. The inside of the lower part of the glass cylinder is lined with a cylinder of wire cloth or gauze; that used in making sieves or milk strainers will do very well. This rises a little higher than the lower end of the gold leaves. A wire passes from its lower part through the base, so that it may easily be connected with the earth when desirable. To the top of the wire above the cap is fastened, horizontally, a thin metalic disk about two inches in diameter. This little electroscope is sensitive to an extraordinary degree. It gives signs of the production of electricity by the friction of almost any two different substances, and enables the student to classify substances as to their electric condition when rubbed together in various combinations; to study electric induction, etc., etc. If thoroughly studied, it will give more real knowledge of the laws governing static electricity than many exhibitions of brilliant and startling effects. Cutting and adjusting the gold leaves will be found the only difficult feature in its manufacture, and for that care and a good temper will be required.

Ohio A. & M. College, Columbus, April, 1874. T. C. M.

THE TEACHING OF HISTORY.

History, if properly taught, is well calculated to interest pupils and to give them enlarged ideas of life and its object. By reviewing past events in systematic order, pupils also gain strength of mind, and are led to see the value of good government and religious liberty. I might enumerate other advantages which the study of history presents, but it is not necessary, as every intelligent teacher understahds its value. I propose in this article to present a practical method of teaching it.

As want of time is urged by teachers as an excuse for not introducing history into their schools, a method is needed which will, in a measure, obviates this difficulty. Geography is taught in nearly every school. Now geography and history are near relatives, and can well go hand in hand. A part of the time usually devoted to the geography lesson, might profitably be spent in teaching the outlines of history. By so doing, no extra class need be formed, and the time required to change seats would be saved.

It is a poor plan to give pupils a text-book in history, and tell them to commit to memory a certain number of pages; for this never fails to check original thought, and is sure to make superficial scholars. The better way is to announce to the class your intention of telling them something in regard to the principle events which have transpired since the creation of the world. Tell them that, in order to build a substantial house, the foundation must be laid firmly, and then the frame erected. Tell them that you propose to present the outline or frame-work of the World's History, and they must complete the structure by reading and study. Have pupils furnished with pencils and note-books. Let the first lesson be a familiar conversation in regard to the Creation. Tell the class that the only history we have of the first two thousand years of the the world is contained in the first five chapters of the Bible. Assign the first chapter for the next lesson. Tell them to read it very carefully, and be prepared to answer any questions you may ask.

Proceed in like manner with the other chapters. It is well to open the school each morning by reading the chapter assigned for the day's lesson. When the scholars have mastered the Bible account of the Creation, then take the subject of the Flood, and conduct the recitations in the same manner as be-

fore. The kingdoms of Egypt, Assyria, Babylon, Persia, Greece, and Rome should then come in succession. Tell them that we have accounts of the above kingdoms aside from the Bible. Under the subject of Babylon, give description of the city. Tell them to find out about Nebuchadnezzar and Belshazzar, also how the Persians captured the city. Give account of ancient Rome, describe the Coliseum, and refer to the birth of Christ as the greatest event in history; tell stories of Roman Emperors, and encourage the children to read extended accounts of the above events, which they will gladly do if they can obtain the books. Lend your scholars what books you have, and help them to borrow others.

Care should be taken about advising children to read large histories through. The better way is to tell them to find the account of the subject they are considering, and read that alone. Question them carefully on what they have read, and see that they gain ideas rather than remember mere words. When the outline of ancient history has been considered, and the children have gained correct ideas of the Old World, prior to the discovery of America, then take the history of the United States, and consider that in connection with the modern history of the Eastern Continent. Let the two chains of history run parallel. Do not dwell too much on details, but let leading events be indelibly impressed on the mind.

When you have brought the outline down to the present time, and your scholars can give in their own language an account of the whole, then you can enter more into detail. For instance, you might take the Revolutionary War, and spend, very profitably, a whole term teaching that subject. I would advise teachers to present the general outline first, which can be done in one term, and then devote a term to each great event. The blackboard should be used daily, and the topics copied by pupils into note books.

By following the above method, scholars are led to study understandingly, and are not left to grope blindly in the dark as too many children are forced to do. By causing your pupils to refer to books for their information, you teach them the true use of books, and break up the habit of learning lessons by rote.

Teachers, give the method a trial, and you will, if you possess in any degree the true spirit of the teacher, have success.

Deering, Me. ELIZA H. MORTON.

CARING FOR PUPILS.

Many teachers think that their duties end with the instruction and government of their pupils in schools hours. Some do not even know where or how their pupils live. They meet their school as the transient lecturer meets an audience, and from thirty to fifty pupils are treated as if they all have the same home life and the same disposition. Such teachers may instruct well, even in an attractive and pleasant manner, but a little care for and interest in their pupils would add to their usefulness and success. The thought, "The teacher cares for me", touches the heart of the child, and adds a new zest to study.

There are teachers who perform their school dnties as faithfully as others, and yet who have hearts large enough for each child to find an individual place therein. When any are absent from school, they find out *why*, and, if sickness be the cause, they either go to see them, or send a note of sympathy, so that both pupils and parents feel that they are remembered by the teacher. If a pupil is difficult to manage, they talk over the matter, in a friendly manner, with the parent,—not to complain of the child, but to find out, if possible, more of its disposition, and the best modes of managing it. Such teachers generally have the coöperation of the parents, as well as the good-will of their pupils. Some portion of the time not spent in the schoolroom ought to be spent in exercise; then why may not the teacher go, once in a while, to the homes of the pupils? It is true that some of these homes are not very pleasant, but the words of interest and kindness there spoken, like bread cast on the water, may come back to the teacher, ere many days go by, filling the heart with gladness. Then cultivate your pupils' acquaintance more in the schoolroom, on the play-ground, and in their homes, and you will make life-time friends.

Another duty of teachers is the *physical care* of their pupils. If headache is prevalent among them, its cause should be discovered, if possible, and removed. The room may contain too much foul air, or the temperature may be too high or too low, or the pupils may have played too hard at intermission, with too sudden a suspension of activity on entering the schoolroom, resulting in nervousness, or palpitation and headache, or a

checking of perspiration, with a liability to take cold if checked too suddenly. By mingling with the children at play-time, the teacher can check them, if the play becomes too noisy, or the exercise too violent.

The manner of going up stairs needs the teacher's observation and care, particularly with girls, many of whom go "with a hop, skip, and a jump", taking two or three steps at a time. Laying aside the want of propriety in ascending stairs in this manner, the more serious error is, that it is in direct opposition to the laws of health. The proper way to ascend stairs is to take one step at a time; and to place on the step the whole of the foot, and not merely the toe, as many do. A few weeks after I commenced teaching, I went to my physician, complained of a tired feeling every time I had to ascend the stairs at school, and asked how I could prevent it. He said, "You go up quickly, and only place your toes on the steps, don't you?" I answered, "Yes." He then gave me the rule which I have mentioned above; and after I had broken myself of the habit referred to, I found it not so tiresome to go up and down stairs.

Again, the seating of the pupils with respect to temperature, should receive attention. After they have once assigned seats to the pupils, some teachers will permit no change. They say, "If I permit one to change because his seat is too near the fire, or another because his is too far, I would have a constant changing, and much disorder would ensue." Severe cold weather does not usually last more than a day or too, and when it does come and it is impossible to get the room comfortably warm in all parts of it, pupils should not be obliged to suffer, lest *perfect order* be disturbed. By going round from place to place in the room, the teacher can ascertain who are in uncomfortable positions, and necessary changes can be made. In this manner countless requests to change seats and complaints of being too warm or too cold may be avoided. When children see the teacher is trying to make them comfortable, they are more apt to wait patiently till they can receive attention.

It is the rule in some schools, that no pupil shall eat his lunch in the schoolroom at noon. In pleasant weather, this is well enough, but when the weather is cold, or chilly, or damp, children ought to be allowed to eat their lunch in the schoolroom, if another suitable room is not provided. A noon lunch at school is apt to be cold comfort any way, and no matter how nicely the room may be furnished, children should not be re-

quired to stand shivering in the cold to eat it. In answer to the objection that crumbs may be scattered and pieces of food be thrown around the room, and much noise be made, I would say, that there are few children who would refuse to sweep up the crumbs they may make, and the discipline of the school should prevent the throwing of food around the room and the making of unnecessary noise.

It may be objected that this would compel the teacher to remain in the schoolroom all noon time, and not have any recreation. This need not be the case, except with very small children. The older pupils know *how* to behave properly, and if thrown on their honor, will, as a general thing, be true to it.

The above suggestions are not untried theories. They have been practically tested and proved true.

Cincinnati, O. RUTH C. WAINWRIGHT.

PARROTS OR THINKERS?

Glancing over the columns of a paper recently, our attention was attracted by the query of a correspondent, who was desirous of learning the best method of making a parrot talk, and by the reply of the editor, who advised him to confine the bird, for five or six hours every day, in the same room with a talking machine, set to repeat the same phrase incessantly, and, after one phrase had thus been attained, to repeat the process with another, and so on *ad libitum*. "A simple method", you say. Yes, very simply for parrots; but how does it strike you, as a process to be applied to humanity? Evidently, that editor had visited some of our schools, had witnessed the manner of teaching therein, seen the results, and recognized its advantages as applied to——parrots.

These "talking machines" are found perched in many a pedagogical chair, repeating their set phrases to the little human parrots before them, or listening with owl-like gravity to their repetition.

With such a teacher, verbal facility of expression outweighs mental comprehension; lingual gymnastics are far superior to mental discipline; the lowest of the representative faculties, memory, more worthy of cultivation than the highest of the

thinking powers, reason; and, as a prominent educator recently expressed it, the simple and sure test of knowledge is the ability to express fully and freely all one knows, and aught which can not be thus expressed, can not be really known. This false test of knowledge must, of necessity, hamper inquiry and blunt the edge of thought. A Chinese wall of separation will be erected between the student and the realm of original investigation, and the empiricism of Maynooth and the Sorbonne displace the free research of which American scientists are now so justly proud. The range of study will be confined to those subjects which can most easily be memorized, or the results of which can be most satisfactorily reduced to formulæ. The high-water mark of pedagogical assumption has certainly been reached, when its results are embodied in this nugget of serene didacticism.

That which a pupil gains memoriter, he may have no difficulty in expressing—he has simply to reproduce the words of the talking machine to which he is indebted for so much; but the finer products of his own brain can not always, on the spur of the moment, be clothed in fitting words. After all, words are but rude, uncouth symbols of our ideas; and through the incompleteness of the type the finer essence, the vitalizing force is lost. The dollar mark ($) represents a commercial idea, yet it would be absurd to attempt to represent therewith the value of an Agassiz's labors to the cause of science throughout the world.

"Expression is the necessity of possession" avers Timothy Titcomb. Possibly, to shallow minds; as the babbling brook overflows with every spring rain; but deeper natures, we think, sometimes echo the poet's plaint,—

> "And I would that I could utter
> The thoughts that arise in me."

If this test of facility of expression be accepted as the true one, and such seems the tendency now among some of our leading educationists, may we not justly fear that we shall subject ourselves to that restraint which Proctor declares fetters free inquiry in England—"an undue obedience to scientific authority." Verbal fluency is no more a test of accurate knowledge than is the warble of the sky-lark a proof that he understands the science of music. Accuracy of expression and a facility of communicating are, we acknowledge, invaluable desiderata, but

that they should become the *sine qua non* of education seems to us a grave mistake.

If education be simply a knowledge of the contents of books, a mere theoretical scholasticism, then, indeed, must this crucial test be applied to gauge the pupil's power; but if, instead, it be, as we can but consider it, an accumulation of skill and power, an ability to do rather than to say, a practical solving of the problems of life, rather than a technical knowledge of the symbols contained therein, then this test must utterly fail.

Thought, when formulated, becomes knowledge; but the reverse is not necessarily true. Few, if any, of us can formulate all we know; and one may possess an accurate comprehension of that which it would be impossible for him to express logically. To translate even the objective into words is not always easy or even possible; much less, the subjective. Who can put into language the glory of an Italian sunset, the odor of the heliotrope, or the voice of the Northern wind? And so we recur to our opening question, Parrots or Thinkers? Shall we train ourselves and our pupils to a reliance upon the words of the text-book and the *ipse dixit* of the teacher, or to habits of original research and comprehensive thought? Shall the prize be given for the repetition of words and phrases, the mere husk and rind, or for the golden kernel within, the precious knowledge itself? Well for us all, if we would indorse in our teaching, that saying of Lessing, "If the Angel of the Lord were to appear before me, holding in one hand, 'Truth', and in the other, 'Seek after Truth', and offer me my choice, I should, with all due reverence and humility, but with all firmness, choose, 'Seek after Truth.'" H. U.

WHAT IS SLANG?

The word *slang* appears to be derived from *sling* by a change of vowel, according to the analogy of *abode, cleft, drove, song, stroke*, from *abide, cleave, drive, sing*, and *strike*. It is not given as a noun in the dictionaries of Blount (1681), Coles (1732), Bailey (1759), Ash (1775), Sheridan (1789), Johnson (1799), or Richardson (1844). Ash, Sheridan, Johnson, and Reid give it as the preterit of *sling*. Richardson, p. 1748, says, "SLANG. See *sling*"; but under *sling* he makes no reference

to *slang*. The word is not given in the English part of Cotgrave's Dictionary (1660), nor is *argot*, which Spiers gives as the French of *slang*. This word *argot* is not found in the dictionaries of Menage and Caseneuve (1694); but Littré says that although the word is given in the Dictionary of the Academy as starting from 1740, yet it appears to have been born near the beginning of the 17th century.

Latham considers *slang* "as words slung at a person; Norwegian, *slenge-ord* = sling-words."

The following is from Wedgwood:

"Slang. N. *slengja*, to fling, to cast; *slengje kiæft'en* (to fling jaw), to give bad words, to make insulting allusions, as in E. *to slang* or *to jaw* one are vulgarly used in the same sense. N. *slengje-ord* (slang-words), insulting words, also new words taking rise from a particular occasion without having a wider foundation.—Aasen. Pat. de Flandre, *nomg'té* (nom jété), a nickname, a name flung on one.—Vermesse."

Latham's definition of *slang* is, "Low vulgar language; language peculiar to a class." Webster (1859) defines it as "Low, vulgar, unmeaning language", and calls the word "*low*." A word is not, necessarily low that expresses a low thing. The words *thief*, *robber*, *drunkard*, *sot*, *vagabond*, etc., are not low words. Worcester (1860) defines *slang* as "vile, low, or ribald language; the cant of sharpers or of the vulgar; gibberish." He gives *slang* as an obsolete imperfect of *sling*, but ventures upon no etymology of the noun *slang*.

The following is from Webster's Dictionary (1864, 1870):

"Slang, *n.* [Said to be of Gypsy origin; but cf. LINGO] Low, vulgar, unauthorized language; a colloquial mode of expression;—especially such as is in vogue in some class of society; as, the *slang* of the theater, of college, of boatmen, etc."

Rev. Wm. Barnes, in his "Tiw; or, A View of the Roots and Stems of the English as a Teutonic Tongue", London, 1862, gives the root SL*NG as meaning to be slack, whence he gets "slang, slack form of speech."

The oldest dictionary in my possession in which the word is found, is Grose's Dictionary of the Vulgar Tongue, 1785. Grose says on p. 150, "SLANG, cant language", and on p. 26, "CANTING, preaching with a whining affected tone, perhaps a corruption of chaunting; some derive it from Andrew Cant, a famous Scotch preacher, who used that whining manner of expression. Also a kind of gibberish used by thieves and gypsies, called likewise pedlar's French, the slang, etc., etc."

Although Bailey (1759) has a dictionary of cant, he does not give in it the word *slang.*

The following is from Hotten's Slang Dictionary, London, 1867:

"SLANG, low, vulgar, unwritten, or unauthorized language. *Gipsy,* SLANG, the secret language of the Gipsies, synonymous with GIBBERISH, another Gipsy word. The word is only to be found in the Dictionaries of *Webster* and *Ogilvie.* It is given, however, by *Grose,* in his *Dictionary of the Vulgar Tongue,* 1785. SLANG, since it has been adopted as an English word, generally implies vulgar language not known or recognised as CANT; and latterly, when applied to speech, has superseded the word FLASH. The earliest instance of the use of the word that we can find, is the following:

"'Let proper Nurses be assigned to take care of the Babes of Grace, [young thieves,] . . . the Master who teaches them should be a man well versed in Cant Language, commonly called the SLANG PATTER, in which they should by all means excel.'—*Jonathan Wild's Advice to his Successor.* LONDON. *J. Scott,* 1758."

Hotten, on p. 4, shows the difference between *cant* and *slang.* He says:

"Now the word CANT in its old sense, and SLANG in its modern application, although used by good writers and persons of education as synonymes, are in reality quite distinct and separate terms. CANT, apart from religious hypocrisy, refers to the old secret language, by allegory or distinct terms, of Gipsies, thieves, and beggars. SLANG represents that evanescent, vulgar language, ever changing with fashion and taste, which has principally come into vogue during the last seventy or eighty years, spoken by persons in every grade of life, rich and poor, honest and dishonest. * * * CANT was formed for purposes of secrecy. SLANG is indulged in from a desire to appear familiar with life, gaiety, town-humor, and with the transient nicknames and street jokes of the day. Both Cant and Slang, I am aware, are often huddled together as synonymes; but they are distinct terms, and as such should be used."

In a footnote to this passage, he adds:

"The word SLANG, as will be seen in the chapter upon that subject, is purely a Gipsy term, although now-a-days it refers to low or vulgar language of any kind, other than cant. SLANG and GIBBERISH in the Gipsy language are synonymous; but, as English adoptions, have meanings very different from that given to them in their original."

Hotten's attempt to restrict the meaning of slang, and thus separate it from cant, is commendable, and the distinction should hereafter be carefully observed by writers and speakers.

Salem, Ohio. W. D. HENKLE.

CORRESPONDENCE AND QUERIES.

FRIEND WHITE: There is a difference of opinion among teachers here respecting the proper solution of the 198th problem, on page 280 of "White's Complete Arithmetic." Will you be kind enough to send us a solution to help us out of our difficulty?

ANSWER.—I have received many requests to furnish the solution to this problem, and several correspondents have doubted the correctness of the answer given in the Complete Arithmetic. To save myself the trouble of answering so many inquiries, I have concluded to publish a solution of the problem. The solution is as follows:

PROBLEM.—*How far from the end of a stick of timber* 30 *feet long, and of equal size from end to end, must a handspike be placed so that* 3 *men,* 2 *at the handspike and* 1 *at the end of the stick, may each carry* $\frac{1}{3}$ *of its weight.*

Solution.—It is a principle of mechanics that the weight of a supported body may be considered as concentrated in its centre of gravity. It is another principle that the centre of gravity of a body of regular shape and equal density corresponds with the centre of the body, which, in the stick of timber described in the problem, is 15 feet from each end. It is also a principle of mechanics that when a body is supported at *two* points, the weight sustained at the two points respectively is *inversely* as their distance from the centre of gravity. Hence in order that the two men at the handspike may support twice as much of the weight as the one man at the end of the stick, the handspike must be placed one-half as far from the centre of the stick. But the man is at the end of the stick, or 15 feet from its centre, and hence the handspike must be placed one-half of 15 feet, or $7\frac{1}{2}$ feet, from the centre of the stick, which is $7\frac{1}{2}$ feet from the end.

$$2 : 1 :: 15 \text{ ft.} : 7\tfrac{1}{2} \text{ ft.}, \textit{ Ans.}$$

1*st Verification.*—If the stick of timber be cut into two equal pieces, the weight of one piece, or one-half of the stick, will be entirely supported by the handspike, and, if the other half be supposed to be supported by an inflexible and weightless rod extending from the nearer end to the handspike, *one-third of the weight of this half of the stick* will be sustained by the handspike, since it is twice as far from the centre of the half of the stick as the other support — the one man at the end. Hence the handspike will sustain *one-half* of the whole stick and *one-third* of the other half of it, or *two-thirds* of the whole stick.

2*d Verification.*—Take a small stick of uniform dimensions and say 30 inches long, and find its weight. Then support one end on a fixed point, and place a cord one-half of the distance from the other end to the centre, and attach the cord to a pair of scales or steelyards. It will be found that the cord supports *two-thirds* of the weight of the stick.

N. B. This problem was inserted in the Complete Arithmetic to test the pupil's independence of formal rules in solving arithmetical problems, and also to make him familiar with several important principles of physics of common application. E. E. WHITE.

MR. EDITOR: I have been looking for an answer to the inquiry of "H. C." respecting the printing or writing of the new words by beginners in reading. In most of the cities, so far as I can learn, children print from one term to a year, and then begin to write. In a few cities, and the number seems to be increasing, the pupils write from the first, and printing is wholly discarded. I should like to know which of these plans is the preferable one. As the chief object of requiring the beginner to copy the new words is to make him more familiar with their form, as an aid to reading and spelling, it would seem that the form of these words on the card or blackboard should be reproduced on the slate. Hence if children are taught to *read* script from the first, they should write the new words; but if they read print, they should print until they are well started in reading. This *seems* to me to be the true plan, but theory must, of course, give way to practice. I see that in several cities pupils are taught to read *both* print and script from the first. What can be the object of requiring the *beginner* to learn two forms of words at the same time? What is gained by such a course? AN INQUIRER.

EDITOR WHITE: In answer to Jas. H. Dodd's question, "When did the time change from *Thursday* noon to *Friday* noon", put to "L. W. H." in the April number of the TEACHER I would say that *the time changed to Friday noon when the* earth had made one-half of a revolution on its axis. This may be illustrated by supposing Mr. Dodd to be holding a globe in his hand, while something between him and it represents the sun—*say the diamond pin in his shirt-bosom.* Now the globe is so held that the sun is on the meridian of Columbus. All places *east* of Columbus have passed noon of Thursday. One-quarter of the way around the earth *east*, it is just sunset, or six o'clock P.M.; while at the same distance *west* of Columbus, it is six o'clock A.M., and at a certain point on the *opposite* side of the earth, near the middle of China, it is midnight, or just approaching Friday morning. Now as Columbus passes to the *east*, it approaches Thursday evening, while all places *west* of Columbus have Thursday noon as they pass the sun—the said diamond and the point in China are approaching Friday morning, and the people of that place will ring the bell for dinner, Friday noon, as soon as they pass within the dazzling splendors of said diamond pin!

Rochester, Minn., April 29, 1874. C. H. ROBERTS.

MR. EDITOR: In declamation, "my" is pronounced with the short sound of *y* or *i*, especially before words beginning with a consonant. In Shakespeare's plays "mine" has the short sound of *i*. Jacques, in "As You Like It", says, "It is a melancholy that is mĭn(e) own." Webster gives only the regular sound of "y" in "my", and makes no exceptions. I shall be pleased to learn whether this pronunciation of "my" and "mine" is authorized. The pronunciation of "my" with the sound of short *u*, as, "I have learned *mŭ* lesson", should not be allowed.

H. C.

ANSWER.—For the pronunciation of "my", our correspondent is referred to Webster's Unabridged Dictionary, p. 53. EDITOR.

EDITORIAL DEPARTMENT.

—— We publish this month the first of a series of papers on experiments in physics, which we know will be very acceptable and useful to many of our readers. Prof. Mendenhall has given special attention to the teaching of elementary physics in public schools, and he fully recognizes the fact that the great want is cheap apparatus and other appliances for illustration. We say cheap apparatus for, as a rule, no other can be employed in the great majority of American schools. Instead of the $25,000 worth of illustrative aids, which Commissioner Philbrick found in a high school in Vienna, most American schools are not even supplied with a globe for teaching geography. Our teachers need to learn how to make a few dollars supply the necessary apparatus for teaching the elements of physical science, and no teacher in our acquaintance can do more in this direction than Prof. Mendenhall.

—— It is not often that the subject of expression is discussed in these pages, and we offer no apology for publishing this month two brief contributions devoted to its consideration. They are written from different stand-points, and do not cover the same ground to any considerable extent. They take opposite positions on the value of language as a test of knowledge and mental power. "H. U." has evidently more special reference to the repetition of memorized language as a test, which he very properly condemns, but he seems also to attach little value to original expression either as a test or as an acquisition. We think that Mr. Cox is right in the position that expression can never be nobler, clearer, or more vigorous than that which is expressed. Thought and feeling are the source of expression. If these are wanting, speech becomes contemptible, howsoever well-ordered the words and sentences. We also concede that too much attention is often given to expression and too little to what is to be expressed. But is not thought often made clearer by an attempt to give it a clearer expression?

—— The Supreme Court of Indiana has confirmed the decision of the Superior Court of Marion County, that the state law excluding colored children from the commoon schools, violates the Fourteenth Amendment of the Constitution of the United States. The case arose from the exclusion of several colored children from the common school in a district which had no separate school for colored youth. The Supreme Courts of Ohio and New York have both decided that the organization of separate schools for colored youth is not a violation of the Fourteenth Amendment, provided that the schools for colored youth afford them educational advantages equal to those provided for white youth. These

several decisions are unquestionably the true exposition of the Fourteenth Amendment in its relation to public schools. It guarantees to white and colored youth equal public-school advantages, but it does not require that they shall be taught in the same rooms. If it forbids separate schools for colored youth, it must also forbid separate schools for boys and girls. The Constitution guarantees that the privileges and immunities of citizens shall be equal, and hence every colored child can demand admission to the public school, if equal advantages are not provided in a separate school. If the people of any state or community are not willing to admit white and colored youth to the same public school, they must sustain two equal schools for them. Their prejudices must be conquered or *paid for.*

—— The consideration of the legislative appropriation bill in Congress affords annually an opportunity for an attack on the National Bureau of Education, but we are glad to observe that the assault grows weaker from year to year, as the usefulness of the bureau becomes more apparent. In the House this year, no objection was made to the manner in which the bureau is administered, but Mr. O'Brien, of Kentucky, was troubled with the fear that it may become, by expansion, the foundation of a national system of education. He resolved to crush it "in its infancy", but finally withdrew the motion to strike out the appropriation. Mr. Monroe, of Ohio, chairman of the committee on Education and Labor, made a brief but able defense of the bureau. Mr. G. F. Hoar, of Massachusetts, submitted a few census statistics, showing that the cost of the bureau last year was only one-third of a mill for each dollar expended for education in the United States in 1870, or two and a half mills *per capita* for the school population! We regret to learn (May 10th) that it is feared that Congress will not order the report for 1873 published for general distribution (owing to the expense of postage), the publication being limited to the executive edition. This will greatly lessen the usefulness of the report, and indirectly of the bureau. Thousands would gladly pay the postage to secure this important document, and we sincerely hope that the general edition may be published even though no provision is made for its distribution.

—— In his annual report, just issued, Supt. Harris, of St. Louis, takes up the Elmira fight which disclosed the somewhat startling fact that there is a conflict between the public and private systems of education. The issue was presented at Elmira in the form of a bold denial of the right of the state to conduct higher education. It was asserted that colleges and universities should be private institutions, having no organic relation to the public school system, and that they should be supplemented by academies and other preparatory schools supported by private wealth,—though Dr. McCosh urged that these secondary schools should receive state and national aid. But this is only a part of the issue, inasmuch as the courses of study of the two systems are based on

radically different theories, that of the public schools uniting discipline and knowledge, and that of the college separating them, and demanding that the preparatory schools shall confine themselves almost entirely to the disciplinary studies. Mr. Harris meets this issue squarely, showing that the public school theory is substantially the correct one, and that the higher institutions should adapt themselves to it, by demanding a preparation in the rudiments of science, literature, and history. His discussion of this question is fundamental and masterly. He also shows the folly and danger of the attempt to degrade the public schools by limiting them to elementary and semi-technical studies. This would result in the establishment of caste schools.

—— In his recent report, Supt. Hancock, of Cincinnati, agrees with all philanthropists in the opinion that wayward and vicious pupils should not be turned into the streets, since they are the very pupils that imperatively need the benefits of regular school training. "At the same time", he adds, "it is equally evident that a vicious pupil should not be suffered to contaminate the whole school by the infection of his conversation or example, but that he should be separated from his companions so soon as it has been satisfactorily established that he can no longer be safely trusted in their society." He reconciles these two apparently opposite duties by suggesting the establishment of special schools for these youth, conducted "by teachers of exceptionably high qualifications, of both head and heart, for their work." He states that he visited such a school in Worcester, Mass., some two years since, and found it one the best of the excellent schools of that city. He also advocates the enactment of a law which shall place the idle and vagrant children that now constantly recruit the army of criminals, in some schools, either public or private, wherein they may obtain at least the rudiments of an education and be trained in moral habits. He sees no valid objection to such a law whatever may be true of the advisability of a general law compelling school attendance.

—— Herbert Spencer has the advantage of most philosophers in his ability to determine facts as well as theories *a priori*. He always has a ready supply of facts. We have an illustration of this peculiar endowment in his late discussion of the value of moral education. Wishing to demolish all state systems of education, he asserts that intelligence does not lessen nor ignorance increase crime. He attempts to sustain this position by the trick of assuming it equivalent to the proposition that mere intellectual culture does not increase a regard for truth, or make the sentiment of justice more powerful, or strengthen the desire to do right—which is so abundantly shown by "facts" that he does not take the trouble to state them. He also disposes of the popular belief in the value of moral precepts by the assertion, in substance, that the moral condition of England has not been improved by the preaching of centuries, and that the school system of the United States, "which

brings up the whole population under the daily influence of chapters which set forth principles of right conduct", is likewise destitute of moral results. It is unnecessary to add that neither Herbert Spencer nor any other philosopher knows what the moral condition of England would now be if there had been no preaching for centuries, and no one has any evidence for the assertion that the moral instruction in the schools of the United States does not improve the moral condition of the people. Every philosopher ought to know that assertion is not fact, nor conceit wisdom.

—— BOARDS of education will soon be called upon to discharge the most important of all their official duties, to wit: the employment of competent teachers for the schools under their control. Whatever else they may have done, all will be of little avail unless this duty be done wisely and well. "Without good teachers", says Dr. Channing,, "a school is but a name." Search, then, for good teachers as with a lighted candle, and, when found, employ them, expecting to pay good wages. Bolt your schoolroom doors against incompetent teachers, at whatever price they may offer their services. The true maxim is, "Good teachers at the price of good teachers, but, at any price, good teachers." Is your school small? Remember that a poor teacher can not teach well even a single child. Is your school "backward"? Employ the best teacher you can find, and it will not long remain in this condition.

—— SEVERAL reviewers of Dr. Clarke's work on "Sex and Education" have called attention to the fact that the physiological fact, which is its basis, applies with as much force to girls' schools as to mixed schools, since regular attendance and regular work are as necessary in one as the other. It is just as difficult to provide for periodicity of study and recitation in separate schools as in mixed schools. If the physiological limitation, stated by Dr. Clarke, forbids "identical coeducation", it must also forbid the attempt to teach girls in classes. As the adoption of a system of individual instruction for all girls during this transition period is utterly impracticable, Dr. Clarke's position practically denies girls a "fair chance" to obtain a higher education. If the physiological argument proves anything, it proves much more than he claims for it.

—— "WHAT We owe to Louis Agassiz, as a Teacher", is the subject of a recent address by George B. Emerson before the Boston Society of Natural History. Among the debts enumerated are the importance of the best and largest possible preparation, the direct use of nature in teaching by things instead of by books, the ready use of chalk and blackboard, the eloquence of voice, look, and manner, and the magnetic power of sympathy. Attention is called to the fact that Prof. Agassiz was early a student of the two great languages of ancient times, Latin and Greek, and that he wrote and spoke French, German, and English with almost equal facility. His example shows that the study of language should not be omitted in the education of the future naturalist.

THE RECITATION—ITS OBJECTS.

There are two kinds of class exercises in our schools. One aims to impart knowledge or skill to the pupil by instruction or drill; the other seeks to ascertain what knowledge or skill the pupil already possesses. The first is properly called a *lesson*; the second, an examination, or, more commonly, a *recitation*. A lesson is characterized by the fact that the teacher instructs, and a recitation by the fact that the pupil recites. Hence exercises in writing, drawing, and music, as usually conducted, and oral exercises generally, are lessons; and exercises in geography, history, English grammar, etc., when so conducted as to require the pupils to state what they know of a lesson assigned from a text-book, or previously taught orally, are recitations.

In many class exercises the lesson and the recitation are combined, and the name of such exercises is determined by their leading feature or aim. When instruction is the chief aim and examination is only incidental, they may be called lessons; but when reciting by the pupils is the leading feature, they are recitations.

There is an evident and marked tendency in American schools to substitute the lesson for the recitation. The latter has largely lost its place in our primary schools, and there are indications that it may well-nigh disappear from our grammar schools. Oral instruction is taking the place of study, and pupils are depending more and more on the living teacher, not only for an explanation of difficulties, but for all their knowledge.

It is not our present purpose to consider the wisdom of this change in school instruction. Suffice it now to say, that whether the lesson or the recitation should predominate in our schools, depends on the true object or end of school training. If the imparting of knowledge is this end, then the lesson is the chief agency needed; but if the great end of school education is to train the pupil to think for himself—to prepare him to acquire knowledge in after life by an intelligent study and use of books, as well as by original investigation, then the searching, inspiring recitation is also needed. We believe that oral instruction should prepare the way for study, and that the lesson should be supplemented by the recitation.

The above remarks are designed to make clear the idea of a recitation, and to prepare the way for a consideration of its objects. What are the objects of a recitation?

In an attempt to answer this inquiry, we shall confine our attention at first to the recitation in higher schools. It will be taken for granted that a lesson has been properly assigned, and that the pupils have been prepared for its intelligent study either by previous training or by special oral instruction. It is not essential that the lesson be one assigned from a text-book, but it is essential that there be a subject for investigation and study or a specified work to be done as a preparation for the recitation.

In conducting a recitation, under the circumstances above indicated, the teacher should aim—

1. *To test thoroughly the pupil's preparation.* This thorough examination is necessary to secure thorough study. A stream does not rise higher than its fountain, and the study of a class never rises above the teacher's tests. If these are superficial, the study of the great majority of the pupils will be superficial; if the teacher's tests are pointed and searching, the pupils will, as a rule, make an effort to meet them. The teacher's tests not only determine the amount of the pupil's preparation but also its character. If the requirements of the recitation are met by repeating words, the pupils will memorize their lessons, but if the recitation tests their understanding of the subject, their study will be characterized by earnest and vigorous thought. The recitation should clearly reveal the results of the pupil's thinking, should disclose every failure in comprehension. It should, in brief, thoroughly test the pupil's mastery of the lesson. When a recitation fails as an examination, it fails in an essential feature. Clear and vigorous thinking is the result of *brain-work.* The teacher may stimulate and guide, but the pupil must do his own thinking. He must grapple with the difficulties of the lesson and overcome them. It is this earnest search after truth, this intense effort of the mind to discover and grasp it, that imparts strength and vigor to the mental powers. There must be explanation and instruction in the recitation, as we shall presently show, but the teacher should not lift the necessity of study from the pupil, converting him into a passive recipient or storeroom. Oral instruction, divorced from study, can not produce vigorous thinkers. Talking is not the most efficient teaching. What is needed in our schools is not a return to the old rote system, but a freer use of recitations demanding thoughtful and critical study.

2. The second object of the recitation is *to train the pupil to tell what he knows.* A full and accurate expression of knowledge may not be the only evidence of its possession, but it is the only evidence that can be accepted in the recitation. Knowledge which can not be expressed by word or act, is usually very indefinite, if not chaotic. But it is not merely as a *test* of his knowledge that the pupil should be held to a clear and accurate statement of it, but as a means of *cultivating expression.* A clear, accurate, and forcible use of language is the prime grace of scholarship, and the cultivation of this power should have a prominent place in school instruction. Every recitation should be made a practical and effective drill in expression. To this end the pupil must have clear and definite knowledge, and this must be expressed in his own language. The best results are secured when the knowledge expressed is the result of the pupil's own thinking and study. A parrot-like repetition of the words of the text-book is not expression, in the true sense of the term, and this is certainly a very poor method of cultivating expression. In nearly all branches of study there are important definitions and principles to be formulated and memorized, but this is exceptional work. But a small portion of the pupil's reciting should be devoted to a repetition of memorized statements. As a means of acquiring facility in the use of language, the pupil should be held to a full as well as an accurate expression of his knowledge. As a rule the pupil's answers should be given in complete sentences. The lesson should be unfolded by the

teacher in a logical order, and due prominence should be given to the more important facts and principles. This will make the pupil's knowledge clearer and more systematic, resulting in a clearer and more logical statement. But it is not enough that the pupil be required to tell what he knows in good language; *his utterance should be distinct and natural.* Every recitation should be a drill in vocal expression. Much of the bad reading in our schools is due to the improper utterance permitted in recitations. The offensive tones once generally used in concert reciting, especially in primary schools, are heard in the pulpit and on the platform. It is almost idle to drill pupils in distinct and natural reading, if they are permitted to mumble or screech in the other school exercises. Pupils should be trained to recite in a pleasant, conversational tone, and with sufficient distinctness to be easily heard in any part of a room of ordinary size. Such training will form the habit of natural and distinct utterance.

3. The third object of the recitation is *to impart instruction.* The amount of instruction to be imparted in a recitation depends on the nature of the lesson and the advancement of the pupils. In grammar and high schools, much necessary instruction may be given in the assignment of the lesson, and this may be done without violating the general principle that assistance should be given to pupils only when it is needed. Every experienced teacher knows in advance whether his pupils will be able to master all the points in a lesson. Instead of leaving them to sure defeat, he should throw just enough light upon the difficulties to enable the pupils to overcome them with the feeling that the victory is their own. It is one thing to solve a difficulty for a pupil, and quite another to enable him to solve it. But it is impossible for teacher or author to anticipate all the difficulties in a lesson, and, besides, explanations needed by only a few pupils in a class can not well be given in advance without depriving other pupils of the joy and benefit of mastering them by their unaided efforts. Moreover, the previous study of a difficult point by the pupil greatly lessens the amount of explanation needed. As a rule explanations should be given only when the recitation discloses obscure places. But instruction is not limited to the explanation of difficulties. The text-book needs to be supplemented by the living teacher. They often present only the *text* of the lesson. New facts must be added, principles must be applied, and mere details must be properly subordinated. Fresh facts must be "thrown in" by the teacher to increase the pupil's interest as well as to shed new light upon the subject. Some studies permit and require more of this direct instruction than others. Most of the facts of history, for example, must be communicated directly, while the facts and principles of mathematics may be "drawn out" indirectly. No branch affords a finer opportunity for indirect oral teaching than geometry. When practicable, instruction should be imparted by the *indirect method.* Whether mental training or abiding knowledge be the end sought, the pupil should never be directly told what he can be led to see or to find out for himself. This is a cardinal principle in teaching. The practical difficulty is to give due attention to instruction and not sacrifice the thoroughness of the recitation

as a test. It requires no little skill and, we may add, self-control to instruct pupils and not recite for them; to give them needed explanation and not think for them. It does not take pupils long to apply the doctrine of probabilities to their recitations to determine the necessity of study, and too many pupils will take the chances if there is not well-nigh a certainty that their knowledge of the lesson will be tested.

The three objects of the recitation, above considered, may be concisely stated, in the order of their importance, thus:

1. TO TEST. 2. TO DRILL. 3. TO INSTRUCT.

This is the true order of subordination in the recitation proper in higher schools. In primary instruction this order is reversed. The first object of the primary lesson, and of the lesson generally in all grades, is *to instruct;* the second, *to drill;* and the third, *to test.* This shows one marked difference between primary and more advanced teaching, including grammar-school, high-school, and collegiate. In the university proper, the recitation again gives place to the lesson or lecture.

NATIONAL EDUCATIONAL ASSOCIATION.

The fourteenth annual meeting of the National Educational Association will be held in Detroit, Michigan, on Tuesday, Wednesday, and Thursday, the 4th, 5th, and 6th days of August next. A cordial invitation has been extended to the Association by the Governor of the state, the Mayor of the city, the State and City Superintendents of Public Instruction, and the Board of Education of the city. The use of assembly rooms for the sessions of the Association has been tendered by the city authorities.

The following is an outline of the programme for the meeting:

General Session.

Report of the Committee on *Upper Schools*—the subject of Dr. McCosh's paper last year. Rev. George P. Hays, President Washington-and-Jefferson College, Pa., chairman of committee.

A National University. President A. D. White, of Cornell University, is expected to present the leading paper on this subject.

Sex and Education. It is intended that there shall be an opportunity for a full discussion of this subject by exponents of the leading views concerning it. Dr. Edw. H. Clarke, of Boston, will present the first paper.

Of the evening addresses nothing definite can at present be announced, except that Hon. John Eaton, Commissioner of Education, is expected to deliver one of them.

Department of Higher Education.

1. *The Elective System in Colleges and Universities.* Prof. A. P. Peabody, Harvard College.

2. *Coeducation of the Sexes in Universities.* Prof. J. K. Hosmer, State University of Missouri.

3. *University Endowments.* Hon. J. B. Bowman, Regent of the University of Kentucky.

4. *Classical Studies in Higher Institutions of Education.* Prof. James D. Butler, Madison, Wisconsin.

5. *Plan of the University of Virginia.* C. S. Venable, Chairman of the Faculty of the University of Virginia.

DEPARTMENT OF NORMAL SCHOOLS.

1. *Report on the Actual Courses of Study of the Normal Schools in the United States, together with statistics relating to such schools.* John Ogden, Assistant Principal of the Ohio Central Normal School, Worthington, O.

2. *What are the Essentials of a Profession; and what must be the special work of Normal Schools to entitle them to be called Professional?* Larkin Dunton, Head Master of the City Normal School, Boston, Mass.

3. *Method and Manner.* Louis Soldan, Principal of the City Normal School, St. Louis, Mo.

4. *Training Schools in connection with Normal Schools.* Report by the chairman of the committee, J. C. Greenough, Principal of the State Normal School, Providence, R. I.

DEPARTMENT OF SUPERINTENDENCE.

Report of the Committee on *Uniform plan and form for publishing the principal Statistical Tables on Education.* T. W. Harvey, State Commissioner of Common Schools, Ohio, chairman of committee.

DEPARTMENT OF ELEMENTARY SCHOOLS.

Several Problems in Graded School Management. E. E. White, Columbus, O.

Language Lessons in Primary Schools. Miss H. L. Keeler, Cleveland, Ohio.

Dr. Armstrong, Principal of the State Normal School, Fredonia, N.Y., is expected to present the subject of *Science in Elementary Schools.*

Complete announcements concerning programme, facilities for travel, hotel accommodations, etc., will be made as soon as possible.

A. P. MARBLE, *Secretary.* S. H. WHITE, PRESIDENT.

It will be seen from the above programme that the Detroit meeting is not to be devoted to the reading of elaborate papers and lectures on education. There is to be an earnest and thorough discussion of a few of the live and important educational questions which are now demanding public attention. We anticipate a lively discussion on the national univesity question, though we think that President Eliot's position last year will have few supporters. Detroit will give the Association a handsome reception, and we hope there may be a large attendance of educators from all sections of the country.

EDUCATIONAL INTELLIGENCE.

—— When notified that a subscriber has failed to receive any number of this journal due him, we always remail it.

—— All new subscriptions for the Teacher may now begin with the April or July number, but we can still supply back numbers from January, the beginning of the volume.

—— Prof. Alpheus Crosby, author of several standard Greek works, died recently at his home in Salem, Mass. In his death the profession of teaching loses one of its most eminent members.

—— An Italian lady, Rossa Piazza, has just received a diploma from the University of Padua, and is now honored with the title of Professor of Pedagogics of the Normal and High Schools.

—— Prof. Albert H. Tuttle, of Cleveland, has been appointed to the new professorship of Zoölogy in the Ohio Agricultural and Mechanical College—an excellent appointment. Prof. Tuttle recently gave a fine lecture on "Sponges" before the Tyndall Association of Columbus.

—— It is said that a majority of the teachers of New Jersey favor the repeal of the clause of the school law of the state, forbidding corporal punishment in the public schools. They believe that the law increases the difficulty of maintaining necessary discipline.

—— Seventeen students will graduate from the Ohio Central Normal School on the 18th of June—a fine class.——Prof. Holbrook, of the National Normal School, writes: "Our present attendance is 810—a splendid collection of good material."

—— The Missouri State Normal School at Kirksville is in a most prosperous condition. It has an attendance of about four hundred students, and a class of forty will graduate in June. The State Normal School at Warrensburg has increased this year from about one hundred students to four hundred.

—— The new school law of Arkansas creates the office of county school superintendent, and wisely provides that the superintendent shall be elected by the school officers of the county. The term of office is unwisely limited to one year. The office of circuit superintendent which proved very efficient in the organization of the school system, is abolished.

—— We learn that it was the common council of Cambridge, Mass., and not of Boston, that abolished the office of city superintendent of schools. We supposed that the "this city" referred to by the *Massachusetts Teacher*, was Boston, and hence our error. However, the legislature is putting the matter right by giving the school committee the power to establish and fill the office.

—— The Supreme Court of Michigan has confirmed the decision of the Circuit Court of Kalamazoo, that taxes can be levied for the support of high schools, and so this vexed question is judicially settled. It would be well for the enemies of high schools to appeal to the next Constitutional convention, where they may be able to muster a corporal's guard!

—— The public schools of Wheeling are making good progress, but the absence of a high school is a serious loss to the system. Some two years since the free use of the buildings of the Linsley Institute was offered for the purpose, and the board voted unanimously in favor of accepting the offer; but, at the same time, by a tie vote refused an appropriation to organize and carry on a high school. On the 8th of May the board sold at public sale the site for a high-school building purchased some years since, thus lessening the prospects for the immediate establishment of such a school in the city.

—— Mr. E. Steiger, of New York, who honored the enterprise of this country by his collection of American periodicals for the Vienna Exposition, is now engaged in gathering the periodical publications of all the countries of the earth for the purpose of exhibiting the same at the Centennial in 1876, if not earlier. This undertaking has already met with the cordial sympathy and assistance of many gentlemen abroad, so that, for instance, upon the mere announcement, specimens of the periodical press of Norway, Turkey, Chili, and of many small districts, in various countries, were sent in, free of expense, by the sympathizers and promoters of the project. He hopes to elicit elsewhere a like spirit of coöperation.

—— The legislature of New York has passed a law that children from eight to fifteen years of age shall receive instruction in the common English branches, either publicly or privately, for at least fourteen weeks each year, and any parent who fails to comply with the law is liable to a fine of from one to five dollars per week. The employment of a child under fifteen, who did not receive the above instruction the previous year, is punishable by a fine of fifty dollars. It is made the duty of trustees in each school district to see that the law is enforced. So the Empire State proposes to try compulsory education, on paper at least. The legislature has refused the appropriation of $125,000, formerly voted the academies of the state on condition that they give normal instruction.

—— We learn from the *Iowa School Journal* that the Supreme Court of Massachusetts decides that either a teacher or parent has the right to correct a child for misconduct on his way to or from school. The case was that of a parent *vs.* a teacher, for assault on a child, who punished a boy for throwing stones at a teamster while on his way home from school. The court held that the teacher's authority is absolute at school, the parent's absolute at home, and between home and school the jurisdiction is concurrent; *i. e.*, either may punish. The only care is, that both teacher and parent keep punishment within its humane and statu-

tory limits of severity. We suspect that this statement makes the decision of the court a little too broad, inasmuch as it has been generally held that the teacher's jurisdiction refers only to cases of misconduct that affect the reputation, discipline, or prosperity of the school. We shall endeavor to secure the full text of this important decision.

ILLINOIS.—The General Assembly has passed a law to protect colored children in their rights to attend public schools. It makes the exclusion of a child from a public school, on account of color, an offense punishable by a fine of not less than five nor more than one hundred dollars. We believe that New York has a similar law. Another act passed by the General Assembly of Illinois abolishes the provisional certificate, and requires every teacher to hold a regular certificate of either the first or the second grade. The second grade certifies that the holder is qualified to teach the common English branches and the history of the United States. The first grade adds the elements of the natural sciences, physiology, and the laws of health. This is a recession from the position taken in the amended law, but we think it is an improvement. Advanced positions are, usually, most securely won by approaches. Supt. Bateman has issued a stirring appeal to the teachers of the state to participate in the Agassiz memorial movement. His heart is as true as his head.

OHIO.—We have received a copy of the annual report of the State Commissioner of Common Schools, but have not space this month for an abstract of its more important statistics. It contains 325 pages, 70 of which are filled with questions used in county examinations. —— The Eleventh District School of Cincinnati, in charge of Mr. W. B. Wheeler and 28 assistant teachers, has enrolled nearly 1,900 pupils this school year, with an average daily attendance of over 1,400. Mr. Wheeler is, we believe, the oldest principal in the city, but his zeal does not abate nor his success diminish.——Five of the eight teachers in the west district of Springfield, O., had no case of tardiness in the month of March. There were but 87 cases of tardiness in schools attended by 1,564 pupils. The reports of the examining committees on the condition of the schools are very complimentary.

OHIO AGRICULTURAL AND MECHANICAL COLLEGE.—We recently had the opportunity of spending a few hours in this institution. We found the college building, which is a fine one and apparently well arranged, nearly finished; the grounds in front laid out and graded; and the new boarding hall occupied. It is believed that all the accommodations, needed for the present, will be fully completed by the beginning of the next college year. It has been unfortunate in some respects that the institution was opened before the buildings and grounds were ready for occupancy, but, as an offset to this disadvantage, the professors have gained a year for preparation, with a comparatively small demand upon them for class instruction. When the students come in anticipated numbers (over forty are now in attendance), the faculty will be prepared to do good work for them. We devoted the time at our command to the de-

partments of Physics, Chemistry, Zoölogy, and Geology, respectively in charge of Prof. T. C. Mendenhall, Prof. Sidney A. Norton, Prof. Albert H. Tuttle, and President Orton. Prof. Mendenhall has already collected a very choice and effective apparatus. It has been selected for utility and not for show, and great pains have been taken to secure the latest inventions and improvements in each department. We have never seen so choice a collection of apparatus for the illustration of acoustics and optics. A considerable number of the most useful and effective pieces were made by Prof. Mendenhall or by his students. We found several students at work in the laboratory. Prof. Norton has also fitted up a very promising laboratory, both for class instruction and individual study. He has evidently been very diligent in the collection of needed material. Several students were at work with the "elements" of matter. We were quite surprised at the progress made by Prof. Tuttle in the short time he has been in the institution. Instead of badly stuffed birds and beasts, after the museum fashion, we found a choice collection of the skeletons of animals representing the different orders and classes, and these are designed to be studied and not simply to be gazed at. The geological museum contains a valuable collection of material gathered by the State Geological Survey, and also other valuable specimens donated or purchased. The room is a fine one. We learn that President Orton intends to spend the months of July and August in the richest and most instructive geological fields of Europe, and he will doubtless bring home a rich collection of material. We have only space to add that we were much pleased with the beginning made by this new institution, and we left it hoping to see it some day, both in fact and in *name*, the Ohio College of Science.

Ohio Teachers' Association.—The proceedings of the Ohio Teachers' Association, at the annual meeting to be held at Put-in Bay, July 1st and 2d, 1874, will include the Inaugural Address of Pres. D. F. DeWolf, of Toledo; a paper on "Compulsory Education in Michigan", by Hon. O. Hosford, of Olivet, Mich.; an address on "True and False Female Education", by Hon. H. A. M. Henderson, State Supt. of Kentucky; a paper on "Illustrative Teaching", by W. Watkins, of Dayton, O.; a paper on "County Supervision in Indiana", by Hon. B. F. Hopkins, State Supt. of Indiana; the Annual Address, by Pres. Jas. H. Fairchild, of Oberlin College; and a paper on "The High School Question", by Supt. Hancock, of Cincinnati. The Superintendents' Section will meet June 30th. The exercises will consist of the Inaugural Address by Supt. McMillan, of Youngstown, O., and addresses on "Higher Education", by Prof. S. D. Barr, of Cleveland; on "School Supervision", by Supt. C. W. Williamson, of Wapakoneta; and on "The Relation of School Officers to a System of Public Instruction", by Hon. H. A. M. Henderson, of Kentucky. An interesting feature of the meeting will be the exhibition of the "Examination Papers" used in the annual promotion of pupils, in the graded schools of the state, which choose to participate. Each school will present papers only on one subject, and those of one entire class in each grade. The programme is a good one, and the indi-

cations are that there will be a rousing meeting. The teachers of Michigan and Indiana have been officially and cordially invited to be present and participate in the meeting, The teachers of Ohio will, of course, be out in strong force as usual.

BOOK NOTICES.

SCHOOL COMPOSITION: Being Advanced Language Lessons for Grammar Schools. By Prof. WILLIAM SWINTON, A.M., Author of "Language Primer", "Language Lessons", "Progressive Grammar", etc. New York: Harper & Brothers.

We like this manual better than any other one of the series to which it belongs. It is based on the same theory as the "Language Lessons", but makes less use of technical grammar as a means of instruction. It properly begins with the simple sentence which is expanded by the addition of modifiers; passes next to the complex sentence, and then to the compound. It treats not only of their construction and punctuation, but also presents numerous and varied exercises for practice, containing sentences used both singly and in combination. The next few pages are devoted to variety of expression, including arrangement and phraseology. Part third contains simple exercises in composition, including letters, business papers, newspaper paragraphs, etc. The remaining portion of the book treats of style, and composition writing generally. The exercises for practice throughout the book are a valuable feature. The work is a compact 16mo. of 120 pages, and is bound in flexible linen cover. We commend it to those who wish assistance in learning to write good English.

AN ANALYSIS OF THE ENGLISH LANGUAGE; or, The Elements of Sentences, in their Forms, Combinations, and Relations, with Methods for Determining Grammatical, Logical, and Rhetorical Uses. By S. S. GREENE, LL.D., Author of "Introduction to the Study of Grammar" and of "English Grammar." Philadelphia: Cowperthwait & Co.

Prof. Greene's former work on Analysis was a new departure among grammatical text-books, and, for nearly twenty years, it has been more than the peer of the similar treatises which have appeared. The fact that it was designed for advanced students has been too often overlooked, and the result, in such cases, has been unsatisfactory. In this manner the book has borne blame belonging to its misuse. "Greene's New Analysis" is essentially an original treatise, so complete and thorough is the revision of the former work. Without making a comparison, we judge that it is less strictly limited to the analysis of the sentence, considerable attention being devoted to etymology and parsing. It is thus made a complete grammatical treatise for advanced classes. The work concludes with an entirely new chapter of seventy pages on higher analysis, in which the logical, rhetorical and grammatical elements are considered in their mutual relations. This valuable chapter is put at the close of the book that it may be omitted if deemed too difficult for class use; but the student of language will find it a suggestive and masterly presentation of the complete analysis of language. We predict that this

second treatise will fully maintain the rank long held by its predecessor as the most thorough and exhaustive treatise on the analysis of the English language designed for use in American schools. It is published in superior style.

PRONOUNCING HANDBOOK of Words Often Mispronounced, and of Words as to Which a Choice of Pronunciation is Allowed. By RICHARD SOULE and LOOMIS J. CAMPBELL. Boston: Lee & Shepard.

The scholar who is acquainted with "Soule's English Synonymes", needs not be told that this little manual is an accurate and trustworthy guide in the field which it occupies. It gives the authorized pronunciation of three thousand words, and, in cases where two pronunciations are allowable, both are given, the more generally accepted being put first. Both the correct and the incorrect pronunciations of many of the words are given. The introduction, explaining the more difficult sounds of letters, and giving cautions against some common errors in pronunciation, is alone worth the price of the volume. We can most heartily commend this little hand-book to teachers and to all who wish to speak the English language with accuracy.

—— MESSRS. GEO. E. STEVENS & Co., Cincinnati, announce that the *School and Home*, two numbers of which were issued last fall, is to be continued under the editorial management of Miss D. A. Lathrop, principal of the Cincinnati Normal School—a sufficient guarantee that it will meet the wants of reading classes. "Reading Papers" are now used in many schools to supplement the reading books, with a marked increase both of interest and progress in reading. Each number of the *School and Home* contains four pages, neatly printed, and it is furnished to schools at $1.50 for one hundred copies, or $12.50 for one thousand copies.

—— PROF. HIRAM ORCUTT, Principal of Tilden's Ladies' Seminary, N.H., has in preparation, to be published at an early day by Thompson, Brown & Co., Boston, "The Parent's Manual; or, Home and Family Training", designed for a counterpart to the "Teacher's Manual" by the same author, published about two years since, and which has had an extensive sale.

NEW BOOKS RECEIVED.

LYMAN'S HISTORICAL CHART. From the Earliest Period to the Present Time. By Azel S. Lyman. Cincinnati: National Publishing Company.

KEY to Lyman's Historical Chart. Same Author and Publisher as above.

THE PARENT'S MANUAL; or, Home and School Training. By Hiram Orcutt, A.M., Author of the "Teacher's Manual", etc. Boston: Thompson, Brown & Co.

CRITICAL ESSAYS on Physics, Metaphysics, and Ethics. By Lawrence S. Benson. New York: James S. Burnton.

A NEW TREATISE ON THE FRENCH VERBS. By Alfred Hennequin, A.M., Instructor in French in the University of Michigan. New York and Chicago: Ivison, Blakeman, Taylor & Co.

MANUAL OF FRENCH POETRY. For the Use of the School and Home. By A. H. Mixer, A.M., Professor of Modern Languages in the University of Rochester. New York and Chicago: Ivison, Blakeman, Taylor & Co.

FIRST STEPS IN GENERAL HISTORY. A Suggestive Outline. By Arthur Gilman, M.A., Author of "First Steps in English Literature." New York: Hurd & Houghton.

OWEN'S COLLEGE JUNIOR COURSE OF PRACTICAL CHEMISTRY. By Francis Jones, with a Preface by Prof. Roscoe, F.R.S. London: MacMillan & Co.

INDEPENDENT CHILD'S SPELLER: Printed in Imitation of Writing. By J. Madison Watson, Author of the National Readers, etc. New York and Chicago: A. S. Barnes & Co.

WARREN'S BRIEF COURSE IN GEOGRAPHY. Philadelphia: Cowperthwait & Co. Price $1.50.

COMMENTARY ON THE NEW TESTAMENT. Designed for Christian Workers. By Rev. Lyman Abbott. Nos. I, II, and III. Price, 25 cts. each. New York: A. S. Barnes & Co.

SCHOOL REPORTS, ETC.

Twentieth Annual Report of the State Commissioner of Common Schools of Ohio. T. W. Harvey, Commissioner.

Thirty-Seventh Annual Report of the Board of Education of Massachusetts. Joseph White, Secretary.

Eighth Annual Report of the Public Schools of Missouri. John Monteith, Supt.

Annual Report of the State Board of Education of Maryland. 1873. M. A. Newell, Pres.

Twenty-Sixth Report of the Public Schools of the City of Washington. J. Ormond Wilson, Supt.

Sixth Annual Report of the Board of Education of Lawrence, Kan. W. C. Rote, Supt.

Course of Study of the Public Schools of St. Louis. 1874. W. T. Harris, Superintendent.

Manual of the Public Schools of Dayton, Ohio. S. C. Wilson, Supt.

Catalogue of Ohio Wesleyan Female College, Delaware. Wm. Richardson, A.M., President.

Report of the Civil Service Commission, 1874.

——MRS. M. JOSEPHINE WARREN can be engaged for institute instruction in Elocution and for Evening Readings for the coming season. Address 1102 Chestnut St., Philadelphia, Pa., care of W. H. Boner & Co.

DRAWING.—Parties wishing to make arrangements for the introduction of drawing in schools are requested to apply to the editor of this journal who can refer them to competent teachers.

SITUATION WANTED.—A lady, who has a State Certificate desires a situation in a High School for the next school year. She can take charge of a room, and teach English, Latin, French, German, and Drawing. Address: OHIO EDUCATIONAL MONTHLY, Columbus, O.

SITUATION WANTED.—A gentleman who has had fourteen years' successful experience in teaching, desires a situation for the year 1874-5, as Superintendent of Schools in a thriving town. Can give excellent recommendations and references. Address: TEACHER,
(care of OHIO EDUCATIONAL MONTHLY), Columbus, O.

THE

NATIONAL TEACHER:

A MONTHLY EDUCATIONAL JOURNAL.

Vol. IV. JULY, 1874. No. 7.

PARENTS AND COMMON SCHOOLS.

All progress in common-school education represents the growth of educational intelligence and interest among the mass of parents. No body of teachers, however enlightened and devoted, can permanently hold a system of public education above the level of parental opinion. For ten years past the country has been vocal with the cry for the "higher education" of woman; but the very small number of young women, even now, actually at work in the higher regions of university life, prove that the vast majority of mothers do not share in these lofty demands. It is by no means certain that the elective system of collegiate studies, as now practiced even in our best American universities, will not become an instrument for doing the will of the multitude of fathers who demand that their sons shall cover a good deal of ground, though spread out very thin. In more than one American city, the patient work of years in the elaboration of a superior common-school education has been undone in a day by a squad of political demagogues calling the spirits of anarchy and ignorance from the "vasty deep" of the barbarism that washes the foundation stones of the republic itself. The best service that the wisest teachers can now render the common-school interest, is to cease from the minute and petty discussions that worry our school institutes, and undertake the education of the masses of the people in a few common-places of our American system. Otherwise, in an hour they know not, they may find themselves out-

side all influential position to help or hinder in the training of the masses. We believe no meeting should be now holden for common-school teachers without a "missionary evening" when the people shall be called to hear the voices of their strongest and most trusted men of all professions in behalf of the common school.

The fact that, of two distinguished superintendents of city schools in the West, one has just barely succeeded, and another may fail of reëlection, before school boards thrown up by this periodical swash of city barbarism, shows what is coming upon us. A generation ago, educational tendencies began in New England and moved West; now, the movement is reversed; and ere we know it, the perils that threaten the common school in Chicago and St. Louis and Cincinnati will be upon Philadelphia, New York, and Boston. Massachusetts now pays twenty dollars per annum for the education of every child in the commonwealth. But more than a fourth of her people are in the hands of leaders, clerical and lay, who have sworn to destroy our state system of education. Already, those influences tell at the State House, and it is a fact that one of the most difficult bodies in the Northern States to move in behalf of educational reform is the legislature of Massachusetts. What with a growing aristocracy of wealth, social, and even university culture, that does not want the children of the masses "educated above their position" in life; a powerful aristocracy of the clergy of various sects, who regard the public schools the most dangerous enemy to their respective ecclesiastical politics; the body of political demagogues who signalize every victory by hitting the head of the schoolmaster; the increasing number of scholars who regard a child like the elder Mill, chiefly as an incipient advocate to be trained for the defence and glorification of a narrow theory of nature and life;—altogether the average American parent to-day is beset with dangerous advisers in regard to the schooling of his offspring. We should say, in considering the attitude of parents to the common school, that the first thing in order is a vigorous crusade to keep the majority of parents up to sound and progressive ideas on the whole theme of public education. Our hope for the future depends on our ability to keep the people right, and the parents of children of school age are practically the people in this respect.

Every day bears new witness to the importance of a reform

in school administration, equivalent to the civil service in the government. In new communities, in a republic, every man is a natural administrator, and rotation in office is the law of public life. But even now American society has outgrown this backwoods system. The attempt to handle the common schools of any American state to-day by the ancient system of local action, would be their virtual destruction. The city of New York, in self-defence, has abolished the noisy crowd of politicians elected as a "board of education", substituting a school committee of picked men, appointed by the mayor, who can be held to strict responsibility. Every great city must follow this lead. In short, the people must learn that an interest so sacred and delicate as public education, is never safe in the hands of school officers elected on partisan, political tickets, or of teachers appointed by boards of education thus elected. The most decisive test now of the intelligence and virtue of the people is their willingness to sacrifice the longing to hold a little office, and to place, especially in these critical posts of school administration, the few wise and strong persons who can help them to obtain a "value received" for the money and faith there invested.

The relation of parents to the teachers of our common schools needs a thorough ventilation. There are mutual duties and mutual demands here which can not safely be ignored.

First, the parents of our common-school children have the right to demand a sort of pastoral interest in the teachers to whom they confide their little ones. To a thoughtful teacher the idea of training fifty children, with little knowledge of the homes they come from, is simply preposterous. Yet how many teachers do not feel it any part of their duty to darken the doors of the people who entrust to them the most sacred treasures of their household. The saving grace of our country schools, with all their defects, is the knowledge of the homes forced upon the teachers. There are a great many things in this country more absurd than the old-fashioned system of "boarding around", which brought the schoolmaster and schoolmistress face to face with every family in the district. We never fully understood the secret of the marvelous success of one of the most eminent of American lady principals till she told her experience in her first country school, in a district where the "mistress" was expected not only to "board round", but, in turn, to sleep with all the small children of her school.

The most common source of contention and failure among the lady teachers in our cities, is their ignorance and sometimes indifference concerning the parents. The teacher of my children has the same right to call upon me for information and sympathy as my minister or my doctor. We believe the instance would rarely occur where any parent would repulse such visitation; while the appearance of the teacher in the homes of the humbler families of her flock would be a holiday; and even a more valuable lesson to the visitant than the average school institute.

The teachers also have a claim upon the parents that can not be justly denied. First, that the parents of their scholars shall make reasonable effort to know them. One of the mysteries of our contradictory human nature is the strange indifference pervading all classes of mothers concerning the persons who instruct their children. How many ladies in any American city have any reliable knowledge of the teachers of their children, compared with the accurate and exhaustive information deemed essential in respect to the dressmaker, the chambermaid, or the coachman? No class of women in America has so good cause for complaint as the young women in our public schools in regard to the mothers of their pupils. Too many women of culture and social position are not above the pitiful conceit of holding the lady teacher as essentially the member of an inferior class; whereas, from this class, especially, will come the women who will lead the American society of the future. The majority of mothers, without reflection, cast their children upon teachers they do not try to know, and never visit, except with a complaint. Far better than a new literary examination would be the estimate of any body of lady teachers, expecting reappointment, by the superior women of the community they serve; and without a greater willingness to cultivate the acquaintance of the schoolmistress by the mothers, we look for no great gains from the presence of women on boards of education.

After all, the deliberate and intelligent opinion of the best parents in a community is the fairest test of the general ability and worth of the teachers. There are qualifications absolutely essential to success in teaching, of which no board of examiners can be cognizant; which the whole race of mechanical, pedantic schoolmasters ignores; of which the only test is the mature conviction of the children, backed by the common

sense of the community. Just as there are books and pictures and operas that die, spite of all the nursing of the cities; just as certain public men, who are called statesmen by the political philosophers, can never govern the state; so many a learned and devoted theorist in education can never "keep school" in a satisfactory way. Sooner or later the case of every such teacher is disposed of by a general public sentiment, often ridiculed and abused, but seldom reversed. We do not believe in the expediency of too much aimless visitation of schools by parents, on their working days. Of course, no clique or individual can rightly control the discipline of the schoolroom. It is sometimes the duty of a superior teacher to resist a whole community on peril of displacement. The teacher should be granted as large discretion and as near a complete authority in the schoolroom as his abilities and character will justify. But the wisest teacher will especially show his wisdom by keeping himself in living communion with all classes of parents, and revising his methods in the light of home experience. And, certainly, the majority of school teachers in our public schools have no such monopoly of manhood or womanhood as to justify the parents in their present carelessness in the supervision of their children's school life.

Three things are essential now to the elevation of the teaching force of our common schools: First, the more careful, general, and professional training of the vast majority of teachers; second, the more generous payment of really superior teachers, and the sharp discrimination in the wages between skilled and unskilled labor in the schoolroom; third, the efficient and constant supervision of public schools by competent public authorities. Neither of these conditions of improvement can be secured until the fathers and mothers of American children can be persuaded to snatch more time from the consuming struggle for wealth, pleasure, social position, and material comfort, and bestow it upon the gathering of the higher treasure, by which their children alone can succeed, in any land and in any life.

Springfield, Mass. A. D. MAYO.

—— THE desire of knowledge is implanted in man: and the mind grows as the body does—by taking proper nourishment, not by being stretched on the rack.—ARISTOTLE.

THE SELF-CULTURE OF THE TEACHER.

Ruskin says that a man entering life ought to know three things: "*First*, where he is; *second*, where he is going; *third*, what he would better do under the circumstances. The man who knows these things, and has his will so subdued in learning them that he is ready to engage with heart and soul in just what he knows he ought to do, I should call educated." Hanson Cox says, "To answer these three questions, Where am I? What am I? Why am I? comprises the entire circle of human knowledge."

It will be readily admitted, I think, that these definitions of the work of an educator are substantially correct. Such a division marks the three great steps in an educational process; and yet these parts are not, and can not be, entirely independent of each other. It would be impossible fully to comprehend the one without much knowledge of the other, so intimately are they interwoven. They are like the net work of rings in Persian tapestry, where each circle is but a portion of the intricate series, and from which it can not be separated without dismembering the whole.

Following the order above indicated, we may conclude that the work of education is, *first*, material or objective; *second*, mental; *third*, spiritual. Education which, as its derivation implies, means the art of developing the mind, of assisting it to grow, must start with the natural, the ignorant, the raw material. The educator is to lift the individual out of this state of nature as quickly and effectually as possible. From animal instincts and sensibilities, enthralled by physical necessities, he must be raised to the status of a reasonable being, who looks before and after; who, subordinating all nature to the service of the spirit, is enthused by such a spirit that, in all his after life, he shall not help to make up that three-fourths of all the people in this world, who move on simply by the unavoidable friction caused by the other one-fourth in passing them. It is the object of the teacher to enlist others for the true life; to fit them for the intelligent observation and performance of all that is good and true. His aim is to enable others to bring their talents and powers to the highest perfection.

Nothing, therefore, is of more importance to the teacher than *self-culture*. He can give to others only what he has himself. He can form in others only what has been formed in himself.

We can influence and guide others only so long as we are working for our own advantage in knowledge and character. The school must always be a place where we school ourselves; and all our lives, whatever we see, hear, or experience, must be a means of our own education and enlightenment. Thus the teacher should ever be a student, and then, because he is growing, he will kindle in the breasts of his pupils a spirit of growth. When animated by a lofty faith, all his pupils will reflect his steadfastness and earnestness. This self-culture of the teacher excites, in the most ready way, the powers of the pupil to self-activity. Not what the teacher does for the pupil, but what the pupil is made to do for himself, is of value. Thus the pupil learns the great lesson of industry and self-reliance, preparing himself for the life of a free man in a free state.

This idea has so unfolded and realized itself, that everywhere and always we are impelled by it to throw responsibility on the individual. The sooner we can make the pupil able to pursue his course of culture for himself the sooner our object is accomplished; for to give the pupil the "tools of thought", as the first outlines of culture have so aptly been called, is our province. In short, our aim should be to rouse the mind to action, to quicken its energies, to stimulate and accustom it to healthy activity, to show it the means and way of discipline and information, and then leave it free to carve out its own destiny, with God, conscience, and the love of truth for its guardians and teachers.

What teachers are needed for this work? Not cramping, formalistic pedants, who stifle all enthusiasm and lofty aspirations in the souls of their pupils; but true, living teachers are demanded. Not those who sacrifice the noble aims of true education, which are of universal and eternal value, to the propagation of a set of opinions, for the sake of personal interest. The time has been, no doubt, when pupils were kept from absolute mental famine by the few grains of wheat with which such chaff and tares were immingled. We believe the time is come when a purer and more nutritious food is to be offered to the oncoming men and women of the land. Education is a living, growing process. No idea of it can be mapped out, circumscribed, and limited by fixed lines, creeds, or formularies. It can not be measured, or definitely laid out, like the angles or the sides of a crystal. No individual can lay down the exact path which a teacher shall pursue. God, who cuts no two

leaves upon a tree after the same invariable pattern, shapes also no soul-work after his own will variously.

The self-culture of the teacher, joined with the attempt of inducing self-activity on the part of the pupil, tests and tempers the mind forming and moulding it to more reflection and higher purposes. Thought leads to action, and action to the evolution of still better thought. The mind reviews and rearranges the knowledge it has gained; its latent powers are developed; the character is strengthened and eventually harmonized and beautified. Such a character will grow with its years more richly creative, more freshly individual.

Having noticed casually the gain in the growth of individual minds by the self-activity of teacher and pupil, let us glance at the duties we, as teachers, owe to the state. The schools are established by the state not for the sake of the teachers, but for the lessons taught. A state wants productive citizenship as her choicest heritage, and in the education, culture, character, and moral worth of those who shall partake of her liberal behests, she is to find and realize the fruition of her hope. The development of vigorous, capable, and cultivated human beings, armed with facts and principles as a propelling power on the track of a well-directed industry, is the prominent need of the times. The state furnishes the means for sinking the mine-shafts, for smelting the ore, for building the steamboats and railroads, but labor, individual labor, plies the pick and shovel; packs the powder and applies the match; builds and tends the fires; works the iron for shafts or driving wheels; runs the engine and pilots the craft. Labor fits the foundation stone of the warehouse or factory; adjusts the girders and lays the floor. Can the state afford to have the laborer, to whose hands the slowly accumulated gains are trusted, a simple tool?—to have him uneducated? Can the state afford the waste of material inevitably resulting from unskillful workmanship? The depreciation of value which follows in the train of ignorance? Only where science leads the way, announcing the laws to be obeyed, and intelligence yields a ready and willing submission to her commands, can economy of material and thrift be the result. It is, therefore, the duty of the teachers to the state to impart the only real knowledge which has life in it, viz., that may be transmuted into practical power, and bless alike its possessor and the community. This duty can be more readily accomplished by the appreciative coöperation of teachers, for

fellowship of teachers is the sunlight of development and growth. The sharing of gifts and talents multiplies their value.

It is left for this country to make the common man rich in conquests over the material world; and not only this but over the world of mind, the heritage of culture—the realized intelligence of all mankind. In making this the object of our lives as teachers, we shall grow into new insights into truth, for it is one of the beautiful compensations of this life that no one can sincerely try to help another without helping himself.

EVA V. CARLIN.

High School, Burlington, Ia.

THE GRAPHIC METHOD.

This is a method which has long been known and in use among physicists and many others, by means of which the results of a large class of investigations, which are generally tabulated numerically, can be presented as a picture to the eye, and thus be more completely as well as more readily studied. When once this is done, however, it immediately appears that what was used only as a means of expressing the results of investigations, becomes itself an instrument of investigation, often revealing interesting and unexpected relations existing among the coördinated phenomena.

The very general application and the great simplicity of this method do not seem to be generally known. It is capable of numerous and varied uses in the profession of teaching, aside from its especial use in instruction in almost every branch. It is the object of this paper to present the method in such a manner as to enable any one to understand and use it, and to show a few of its capabilities in the way above alluded to.

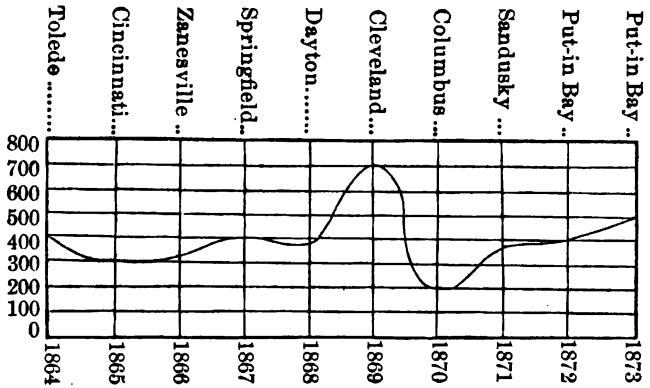
The object of the graphic method in its simplicity may be said to be the representation in a line, curved or straight, of the relations expressed in two or more columns of figures. The results to be represented and studied, should first be tabulated. Its working may best be illustrated by means of an example. On account of its great simplicity, I select for this purpose the

representation of the fluctuation in the attendance of teachers at the annual meetings of the Ohio Teachers' Association during the past ten years. I ought to say in the beginning that I have no sources, absolutely accurate, from which to draw my information in this case, and I believe there are none. No records of the number of teachers in attendance have been regularly kept, and my table is prepared by making an average of the estimates of a few persons who have been present at every meeting, and have had, perhaps, exceptional facilities for forming an opinion. The estimates can not be very far from the truth, however, and, whether accurate or not, will serve equally well for my purpose. The year, place of meeting, and estimated number in attendance are given in three columns below:

1864	Toledo	400
1865	Cincinnati	300
1866	Zanesville	325
1867	Springfield	400
1868	Dayton	375
1869	Cleveland	700
1870	Columbus	200
1871	Sandusky	350
1872	Put-in Bay	400
1873	Put-in Bay	500

We begin the construction by drawing two lines at right angles to each other. The absolute length of these lines will depend on the desired size of the figure and the relative lengths will be determined by circumstances which are difficult to explain, but which are easily understood when they make their appearance as they do in every problem of this kind. In the following construction, the horizontal line has been made three inches in length, and the vertical line on the left one inch. These are the two coördinates, corresponding to the equator and standard meridian in the estimation of latitude and longitude, from which the position of any point in the curve is to be reckoned. The base line is divided into nine equal parts and vertical lines one inch in length drawn at the points of division. The vertical ordinate is divided into eight equal parts and lines drawn parallel to the base at the points of division. Time is measured from the lower left-hand corner, or origin, on the base line and attendance on the vertical ordinates. One inch is made to express an attendance of 800 people, and, of course, one-eighth of an inch corresponds to an attendance of 100, and so on in like proportion.

Curve of Attendance at Ohio Teachers' Association from 1864 *to* 1873.



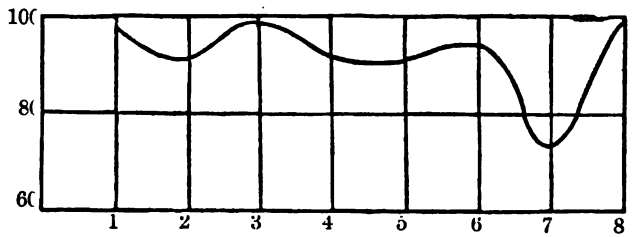
The construction of the curve will be easily understood. Beginning at the left a line is measured from the base on the vertical ordinate one-half an inch in length, and a point is made there to mark an attendance of 400. On the next ordinate a point is made at three-eighths of an inch from the base for an attendance of 300. The next point is one thirty-second of an inch higher to represent 325, and so on to the ordinate corresponding to the year 1873. These points are now joined by a line, which, in the present case, might as well or better be made up of straight lines, proceeding directly from each point to the next, inasmuch as the changes from one to the other are, in fact, abrupt, but in general should be curved as representing changes which are gradual in their character.

The construction of the curve being completed, we may give attention for a moment to its value. Supposing it to be based upon facts, it is evident that it presents the fluctuations in attendance at our annual meetings in a much more forcible and striking manner than is possible with the numerical representations of the same facts. We are immediately struck with any remarkable fluctuation in the curve, as in the case of the rapid descent from 1869 to 1870, and are at once lead to seek for a cause, if any exists. Those familiar with the history of the Association, will readily find it in the fact that, after the meeting of 1869, it was resolved by the executive committee to discontinue the practice of asking citizens to entertain ladies in attendance free of expense, and, before the meeting of 1870, it was announced that all could have the advantage of a reduction in hotel rates, but that no arrangements would be made

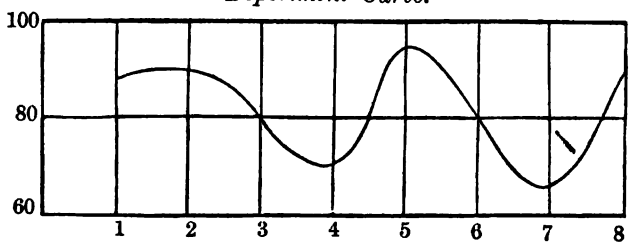
for free entertainment. Without doubt all of the variations in the curve are susceptible of equally satisfactory explanations, this being referred to simply to show that the curve is not only a telling representation of the facts, but that it may also lead us to certain considerations which might otherwise escape us.

Such constructions may be made of great use to principals, teachers, or superintendents in the presentation and study of school statistics. In schools, in which deportment, scholarship, and attendance are recorded in percentages, the application of the method will be found exceedingly easy and of great interest. A single pupil, a class, a school, or a set of schools may be represented in a single curve. Below are three curves, showing the attendance, deportment, and scholarship of a young lady during her third year in one of the prominent high schools of the state.

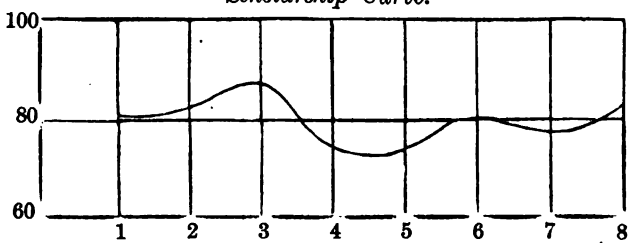
Attendance Curve.



Deportment Curve.



Scholarship Curve.



The divisions of the lower or base line represent periods of time of five weeks each, examinations being held and records

made up at the end of every five weeks. The divisions of the vertical ordinate at the left are "per cents" as marked. There being nothing in this year's record below 60 per cent, all of the figure below this line was, for convenience, omitted. The curves begin, of course, at the close of the first period and end at the close of the eighth. To prevent confusion, the three curves are here drawn separately, but in the original they are constructed upon the same coördinates, one in red, one in blue, and the other in black. For purposes of comparison, they should be drawn together, and I venture to assert that teachers will find few things more interesting than the study of a set of these curves, neatly drawn, representing the work in school of one or several pupils for one or several years. In some of these curves already drawn, I have found some curious relations between deportment, scholarship, and attendance, which incline to upset some of our orthodox and well-established principles.

I need not enlarge upon the idea of the graphic method, my sole desire being to present it in such a shape that it might be grasped by the reader. In the hands of any person of fair ingenuity, it will yield results in all directions, and become more powerful as the operator becomes more skillful in its use. It may represent the result of a series of physical experiments, or it may show to a boy a picture of his own behavior during a month or a year previous, and is so good a thing to know that I sincerely hope this brief introduction may be the means of enabling many to cultivate a more extensive acquaintance.

Ohio A. & M. College, Columbus, O. T. C. M.

KINDS OF PUNISHMENT.

In a recent article I tried to explain the object of punishment. It is my object in this article to point out and classify, for the benefit of young teachers, the principal kinds of punishment used in schools with some general remarks respecting their use.

We find in our schools a great variety of pupils who, to a greater or less extent, are committing a great variety of offenses, while the same offense is committed in different degrees of intensity. There must, therefore, be a great variety of punish-

ments, and they must be inflicted in different degrees of intensity. The right adaptation of different punishments in the right degree to different offenses and different pupils, calls for the highest wisdom and the best judgment that the teacher can command. It is constant steering between Scylla and Charybdis in order to reach the object never fully attained, viz., the prevention of wrong-doing.

The punishments commonly inflicted in schools may be classified under four heads: 1. Those that disgrace. 2. Those that impose a task. 3. Those that deprive of some privilege. 4. Corporal punishment. This may not be a perfect classification, but it is a convenient one.

1. *Punishments that disgrace the scholar.* Any kind of punishment is a disgrace, but some kinds are particularly so. The following are examples: Requiring a pupil to stand on the floor, or on a dunce block, requiring him to sit with one of the opposite sex, giving demerit marks, announcing his name to the school, reproving him in the presence of the school, writing his name on the blackboard, looking steadily at him until the eyes of the whole school are upon him, sending word of his misconduct to his parents or friends. Some of these punishments are valuable and some are not. Most of them may be used, if done wisely. The teacher must remember that some natures are so hardened as to have no sense of disgrace under any such punishment, while others are so keenly sensitive that some of these punishments would almost crush them.

2. *Punishments that impose a task*, such as performing a certain number of examples, learning an extra lesson, bringing in wood, sweeping out the room, repairing injury to property, etc. These punishments are sometimes effective with lazy scholars, but teachers should be very careful how they make *study* a punishment. It is only with rare natures that it can be made a reward, but it can, at least, be kept out of the sphere of rewards and penalties.

3. *Punishments that deprive the scholar of some privilege.* These should be used by the teacher more than all the others put together. The extreme punishment under this head is to publicly expel the offender from school. This should be done when necessary, but only when other means have failed. Lower degrees of this punishment are, privately to dismiss from school, to suspend for a time, to refuse the privilege of reciting with one's class, to refuse permission to whisper or leave the seat for

a certain time, to separate those who wish to sit together, to keep in at recess or at noon or after school; in short, to take from the scholar whatever may be considered *by him* as a privilege in connection with the school. If he does not wish to go out at recess, it will be no punishment to keep him in. The teacher must consider not what the scholar *ought* to regard, but what *he does* regard as a privilege.

4. *Corporal punishment.* The following are some of its forms: Feruling the hand, using a rod on the back or on the legs, striking the ears with the hand or with a whalebone, shaking by the collar, obliging the offender to stand on one leg or to hold a weight in the outstretched hand. Some of these are cruel, and should never be used.

Objections can be urged against all these different kinds of punisment, but, in regard to most of them, the objections are valid only so far as they are directed against their abuse. The truth, in regard to corporal punishment, seems to be about as follows: The parent undoubtedly has the right to inflict it upon the child, answerable, of course, to the law for any abuse of the right. The teacher stands *in loco parentis*, in the place of the parent, and has the same right, unless forbidden by law, as he is in some parts of the country. Like the parent he is answerable to the law for an abuse of the right. But the right should be used very sparingly and carefully. Great care should be taken not to injure the body. No offense will justify the teacher in striking a child's head. The punishment should be inflicted with kindness, and in such a way that you will be sure of having the sympathy and support of the school, or of the better part of it. Otherwise nothing will be gained. The fear of bodily pain is the lowest motive that can be used with a child. It should be the last motive. Corporal punishment should be evidence either that the child is a very hard case or that the teacher is.

Hamilton, N. Y. R. T. Cross.

——The most critical interval of human nature is that between the hour of our birth and twelve years of age. This is the time, wherein vice and error take root without our being possessed of any instrument to destroy them.—Rousseau.

THE PRAYER OF AGASSIZ.*

On the isle of Penikese,
Ringed about by sapphire seas,
Fanned by breezes salt and cool,
Stood the Master with his school.
Over sails that not in vain,
Wooed the west wind's steady strain,
Line of coast that low and far
Stretched its undulating bar,
Wings aslant along the rim
Of the waves they stooped to skim,
Rock and isle and glistening bay,
Fell the beautiful white day.
Said the Master to the youth:
"We have come in search of truth,
Trying with uncertain key
Door by door of mystery;
We are reaching, through His laws,
To the garment-hem of Cause,
Him, the endless, unbegun,
The Unnamable, the One,
Light of all our light the Source,
Life of life, and Force of force.
As with fingers of the blind
We are groping here to find
What the hieroglyphics mean
Of the Unseen in the seen,
What the Thought which underlies
Nature's masking and disguise,
What it is that hides beneath
Blight and bloom and birth and death,
By past efforts unavailing,

*Mr. Whittier has kindly placed this poem at the disposal of the "Agassiz Memorial Committee", for the furtherance of their object. His sympathetic reply to the request for its use is as follows:

AMESBURY, 30 3 *mo.*, 1874.

Agreeably to thy request, I send a copy of my poem on Agassiz. It is most fitting that the Teachers of our country should take a prominent part in the testimonial to their beloved master. I am sure they will all esteem it a privilege to thus manifest their love and reverence.

I am very truly thy friend,
JOHN G. WHITTIER.

Doubt and error, loss and failing,
Of our weakness made aware,
On the threshold of our task
Let us light and guidance ask,
Let us pause in silent prayer!"

Then the Master in his place
Bowed his head a little space,
And the leaves by soft airs stirred,
Lapse of wave and cry of bird
Left the solemn hush unbroken
Of that wordless prayer unspoken,
While its wish, on earth unsaid,
Rose to heaven interpreted.
As, in life's best hours, we hear
By the spirit's finer ear
His low voice within us, thus
The All-Father heareth us;
And his holy ear we pain
With our noisy words and vain.
Not for Him our violence
Storming at the gates of sense,
His the primal language, his
The eternal silences!

Even the careless heart was moved,
And the doubting gave assent,
With a gesture reverent,
To the Master well-beloved;
As thin mists are glorified
By the light they can not hide,
All who gazed upon him saw,
Through its veil of tender awe,
How his face was still uplit
By the old sweet look of it,
Hopeful, trustful, full of cheer,
And the love that casts out fear.
Who the secret may declare
Of that brief, unuttered prayer?
Did the shade before him come
Of th' inevitable doom,
Of the end of earth so near,
And Eternity's new year?

In the lap of sheltering seas
Rests the isle of Penikese;
But the lord of the domain
Comes not to his own again;
Where the eyes that follow fail,
On a vaster sea his sail
Drifts beyond our beck and hail;
Other lips within its bound
Shall the laws of life expound;
Other eyes from rock and shell
Read the world's old riddles well;
But when breezes light and bland
Blow from Summer's blossomed land,
When the air is glad with wings
And the blithe song-sparrow sings,
Many an eye with his still face
Shall the living ones displace,
Many an ear the word shall seek
He alone could fitly speak.
And one name for evermore
Shall be uttered o'er and o'er
By the waves that kiss the shore,
By the curlew's whistle sent
Down the cool, sea-scented air;
In all voices known to her
Nature owns her worshiper,
Half in triumph, half lament.
Thither Love shall tearful turn,
Friendship pause uncovered there,
And the wisest reverence learn
From the Master's silent prayer.

MODELS FOR PARSING.

In an experience of five years in teaching English grammar, I have not found one person who has any regular order or method in parsing the different parts of speech. Very many who have studied several text-books, or, it may be, have taught English grammar, can not parse a verb without staggering and hesitating, and then do not know when they have said enough. This is not the fault of the pupil nor altogether of the teacher, but generally of the text-book.

In mathematics and natural sciences we condense and formulate as much as possible. Why not do so in English grammar? Where is there an English grammar that teaches the pupil exactly how to parse each part of speech?

My most successful teaching of English grammar has been done without a text-book, and I have always found the best in the classes to be those who never used a book on the subject. But as few of our common school teachers could or would teach without a text-book, should not these books be made on the condensed and formulated plan, just such as the teacher uses without a book?

The reason why so many of our pupils call grammar a dry and senseless study, is simply because there is neither method nor order in teaching it. This may be easily shown by asking a class to parse a word. That two in twenty should parse the same word in exactly the same way, would be a mere chance.

If teachers will adopt definite models, and require every pupil to parse each part of speech in exactly the same way, and to give every time the same reason for each step, it will add very much to the interest of the study, and be a great saving in time. Above all it will give the pupil a method of parsing by which he may be always sure when he is right. As soon as pupils can give the reason for everything, then, and not till then, should they be permitted to name only the properties and relations necessary in parsing a word, but these should always be given in the same order. Exceptional usage will need an exceptional form.

Knoxville, Tenn. L. VAN FOSSEN.

PRONUNCIATION OF ROME.

In Walker's Key to Classical Pronunciation, 1808, *Rome* is pronounced *room*. Worcester says, "it is pronounced *room* by Walker, Perry, and Jones, *room* or *rome* by Fulton and Knight, and *rome* by Smart. He adds also the following note:

"'The *o* in this word', says Walker, 'seems irrevocably fixed in the English sound of that letter in *move*'; but Smart calls it the old pronunciation, which modern practice has discontinued.'"

Coles, in his English Dictionary, 1732, has the following in a list of words of like pronunciation, but of different spelling:

"Room, *space.*
Rome, *in Italy.*"

Certain passages in Shakespeare are supposed to show that in Shakespeare's time *Rome* was pronounced *room:*

"Now is Rome indeed, and room enough."—*Julius Cæsar*, Act. I, Sc. II.

"Here is a mourning Rome, a dangerous Rome,
No Rome of safety for Octavius yet."—*Ibid*, Act III, Sc. I.

"That I have room with Rome to curse a while."—*King John*, Act III, Sc. I.

Staunton quotes the following from p. 122 of Prime's *Commentary on Galatians*:

"Rome is too narrow a Room for the church of God."

There is also evidence that *Rome* was also pronounced *rome*:

"*Winchester.* Rome shall remedy this.
Warwick. Roam hither then."—*I Henry VI*, Act, III, Sc. I.

"The fashion has not yet quite passed away of pronouncing *Rome* as the word *room* is pronounced. This is an ancient pronunciation, as is well known from puns in Shakespeare. No doubt it is the phantom of an old French pronunciation of the name, bearing the same relation to the French *Rome* (pron. *Rom*) that *boon* does to the French *bon*. But what is odd about it is, that in Shakespeare's day the modern pronunciation (like *roam*) was already heard and recognized, and that the double pronunciation should have gone on till now, and it should have taken such a time to establish the mastery of the latter. The fact probably is, that the *room* pronunciation has been kept alive in the aristocratic region, while the rest of the world has been saying the name as it is generally said now. *Room* is said to have been the habitual pronunciation of the late Lord Lansdowne; not to instance living persons."—*Earle's Philology of the English Tongue*, Oxford, 1871

We may make three suppositions as to the pronunciation of the words *room*, *Rome*, and *roam* in Shakespeare's time: First, that they were all pronounced *room;* second, that they were all pronounced *roam;* and, third, that there were two pronunciations, *room* and *roam*, and that *Rome* fluctuated between them. In favor of the pronunciation *room* for *roam*, there may be cited the vulgar pronunciation *loom* for *loam*. We have the authority of John Jones, M.D., (Practical Phonography, 1701), for pronouncing *oa* in *aboard* and *boar* [now *boor*], a clown, as *oo*. Shakespeare rhymes *Roam* with *doom* and *groom*. Bullokar, in 1580, pronounced Rome *room*. Ellis asserts that both pronunciations *rome* and *room* "have been in use since the middle of the XVIth century"; that "in Shakspere's time it [room] was a fineness and an innovation."

In the XIVth century, or in the time of Chaucer, *oo* represented the long sound of the open Italian *o*, which Ellis gives as the same as the sound of *o* in the English provincial pronunciation of *home*.

Salem, Ohio. W. D. HENKLE.

EDITORIAL DEPARTMENT.

—— PRESIDENT SCOTT, of the Ohio University, Athens, calls our attention to the increasing demand for the introduction of additional studies, as algebra, history, physiology, physics, etc., into country schools, thus requiring more of teachers than can be well done, and sacrificing thorough instruction in the elementary branches. As a remedy for the difficulty, he suggests the establishing of a higher school for every three or four districts, and the promotion of pupils to these schools on examination, as is now done in the graded schools of cities and towns. The necessity of providing a grade of higher schools for country districts has been often urged, but no plan yet devised has proved acceptable to the people. We have requested President Scott to present his views on this subject to our readers. We agree with him in the opinion that something must be done to provide better educational advantages for country youth.

—— WE have seen too many attempts to cripple public schools result in their actual strengthening and advancement, to become alarmed at the present opposition to the public school system. It is sometimes a good thing for noisy destructionists to have a chance to put their so-called "reforms" into execution. It does not take the people long to see that pulling down is not building up, and that a talent for destruction is not a good qualification for the director of any public interest. But there is certainly sufficient ground for Dr. Mayo's suggestion that a direct and general effort should be made to give the mass of the American people sound and progressive ideas on the subject of public education. So long as the people are kept right, the public school can receive no permanent injury, and the continued progress of the public school system, notwithstanding the repeated assaults upon it, is evidence that the heart of the people, at least, is right. What is needed is increased popular intelligence on the question of public education, and that the majority of parents have a livelier personal interest in the proper education of their children. The cause of public education needs to be reconsidered in the court of the people.

—— A SUBSCRIBER writes us urging the importance of school visitation as a means of professional improvement, and suggesting that teachers should be allowed one day each term for this purpose. He very properly remarks that teachers should not forget professional courtesy when visiting each other's schools, and that they should avoid criticism even though they may see much that is faulty. A visitor should endeavor to make his presence agreeable to both teacher and pupils. Nothing is in

much worse taste than for two or more visitors at a school to indulge in conversation while the exercises are in progress. We will also add that no visitor at a school should expect the teacher to neglect his classes to entertain him. We once seriously offended two teachers by not suspending our recitations to visit with them. We took it for granted that they wished to see our school, and, in accordance with our habit, we proceeded with our regular work. We learned afterward that they expected to receive our attention, or, at least, that they expected us to improvise a special entertainment for their benefit! When our entrance to a schoolroom stops the recitation then in progress, we conclude that the teacher is either ashamed of his work or is annoyed by our presence. The suspension of the regular work to introduce a more showy exercise or a better class, is a trick very familiar to those who are accustomed to visit schools. If a visitor calls for a special exercise, a teacher may be justified in setting aside the regular order.

—— At a recent meeting of the Congregational Board of Education in London, England, the educational system of the United States was eloquently advocated by Sir Charles Reed, of the British Parliament, and others, as superior to any other in existence,and the hope was expressed and applauded that it would be imitated in England within two generations. The superiority of the graded schools of the United States was also acknowledged by one of the foremost German educators in a convention held in Prussia some three years since. The non-sectarian character of the American school, the very feature most criticised here by the enemies of the system, is commended abroad as the true basis of public education, and it is generally conceded by those competent to form an opinion, that the American schools are, at least, not inferior in moral influence to the sectarian schools of other countries. We observe that many foreigners have fallen into the error of supposing that religion is entirely excluded from American schools. This has been attempted in a few localities, but the moral sanctions and authority of unsectarian religion are almost universally recognized by American teachers. Every attempt to devise a scheme of moral instruction which shall utterly ignore all religious truth and sanction has thus far utterly failed. The most obvious defect in the American school system is the absence of adequate provision for technical and industrial education, but this defect is being removed by the organization of special schools to supplement those devoted to general education.

—— Ohio is not the only state in which the attempt has recently been made to take from the people the right to determine what text-books shall be used in the public schools, and to vest this authority in a state board or committee, subject to all the corrupting influences which such a responsibility invites; but we believe that an Ohio legislator has the unenvied distinction of proposing the most ridiculous plan yet devised for accomplishing this purpose—though a member of the Minnesota leg-

islature has good cause to claim about equal folly. The "State Uniformity" mania broke out in unexpected strength in the late legislature of Pennsylvania. A bill to appoint a state commission to examine and select text-books to be used in the common schools of the state, passed the Senate by a vote of 20 to 10, and the House committee on education reported it favorably, but, before final action was reached, *the people were heard from*, and the bill was defeated by the decisive vote of 58 nays to 20 ayes. A similar measure has recently been defeated in several other states. There seems to be an increasing number of politicians who have lost confidence in the ability of the people to manage their own affairs, especially *when state control affords a fat job for those who are inside the favored Ring!*

—— A LATE number of the *Boston Gazette* contains a long and well-considered review of "Children's Magazines", ending with a history of the starting of *St. Nicholas*, the most meritorious and promising of all the juvenile periodicals now published. The writer calls attention to the opportunity for mischief possessed by a widely circulated youth's paper, and thus suggests the duty of a close and vigilant public scrutiny of this class of periodical literature. It would be a public blessing if there could be established such a vigorous and wise censorship over juvenile publications that not a worthless or immoral book or paper could be issued without immediate exposure and condemnation. A writer who is willing to corrupt youth for the sake of producing a sensational article, deserves the severest punishment, and we are sorry to believe that such corruptors of the young are not always excluded from children's magazines, and that their poison sometimes lurks even in Sabbath-school literature. The public must be its own censor, and may the time soon come when this duty will be keenly and faithfully discharged.

—— WE have hitherto taken no part in the discussion of the question of model or practice schools in connection with normal schools. We supposed that the value of practice as a means of learning any art was fully settled by experience, and that actual trial would soon show how far this practice can be advantageously combined with the course of training in normal schools. But it seems somewhat difficult to ascertain what are the results of experiment in our normal schools. We recently read a paper on this subject, in which it is asserted that the normal graduates who have most effectively demonstrated the value of normal training, have come from normal schools which have no model schools. We more than suspect that this statement is not based on actual knowledge, for we do not believe that any one man is yet in possession of the facts necessary for such a generalization. But it is unquestionably true that some of the most successful teachers in the country are graduates of this class of normal schools, and it is also true that equally successful teachers have never attended any normal school. If the first fact disproves the value of practice schools, the second shows the inutility of

normal schools. But such facts as these prove nothing respecting the value of normal training of any kind. Theory demands the school of practice as an indispensable adjunct of normal school. What is the verdict of experience?

—— ONE of the leading daily papers of the country thus comments on the practice of requiring pupils to study at home:

"The object now seems to be to so arrange the schools and households of the land that the teacher may simply sit in judgment upon the manner in which the child has been taught at home. Children go to school, not to learn, but to show the teacher how much they have been taught during the preceding evening at home."

A Philadelphia father recently published a similar indignant protest against the demands of the schools upon parents for the assistance of their children in the preparation of lessons. We make no answer to these protests, but we do object to the intimation that the demand of the schools for home study or home instruction is increasing. The fact is the tendency is in the opposite direction. There is a marked decrease of study both in school and out of school, and as marked an increase of instruction by the teachers. Indeed, it is questionable whether there is not too much teaching, so-called, in many schools. It is certain that the amount of home study now required of pupils, is not so much due to a want of instruction in school hours, as to the great number of studies crowded into the course. The old system of "lesson hearing" may still prevail in some localities, but it is rapidly disappearing from American schools.

—— SUPT. HARRIS, of St. Louis, has devoted sixteen pages of his late report to the discussion of the question of the coeducation of the sexes. He holds that "the tendency of coeducation is to elevate the standard of admiration from mere external charms of person to the spiritual graces and gifts which lie deep in character", and thus "the atmosphere of mixed schools is de-sexualized." "That the sexual tension be developed as late as possible, and that all early love affairs be avoided is the desideratum, and experience has shown that the association of the sexes on the plane of intellectual contest is the safest course to secure this end." These positions are ably sustained. He next denies the doctrine of "physiological limitation", the subordination of the mind and its culture to the organization of the body—a theory held, he thinks, by a great majority of physiologists and physicians of the present day. But the article is chiefly devoted to a consideration of the question whether the vocation of woman necessitates a different course of study. It is conceded that under all circumstances woman's sphere must include a closer relation to family life than the sphere of man, but it is argued that under the different stages of human progress the sphere of woman widens, and the vocations of the sexes separate less and less until the epoch of machinery is reached, and man is emancipated from physical labor. In this realm of thought and directive power, "the special fitness or unfitness arising from sex is a *vanishing element*, and there ap-

proaches an ideal wherein a concrete identity of spheres and vocations is to be found." The conclusion reached is, that the demand for the same course of study for the two sexes is paramount, that for coeducation subordinate, although of considerable importance.

—— Professor Blakie says that every young student should study as much as possible on his feet, and that he should exercise in the open air at least two hours every day. When he does sit, he should sit erect, with his back to the light, and with a full and free projection of the breast. The habit of sitting with bent back and doubled chest is a sin that Nature does not forgive. He recommends the practice of studying languages by reading the finer passages aloud, thus strengthening the lungs and, at the same time, training the ear to the perception of vocal distinction—a matter too much neglected in our schools. He urges with reason and force that it is not necessary for students to indulge in sedentary habits to the sacrifice of physical vigor and health.

—— The State Teachers' Association of Illinois, at its late session, adopted a report asserting "that a republic requires a different education from a monarchy, because the special duties which are required of the citizens of a republic; that the state is the only power which can provide the education essential to its own perpetuity, and make it universal, ample, and impartial, and that the extent of this education should be commensurate with the claims to be made upon its citizens. Considrations merely economical require a wide range, and nothing which pertains to our social life is properly excluded, and the high school and the university in its broadest sense are legitimately within the province of the state." This is sound doctrine. The report was submitted by Hon. Newton Bateman, State Superintendent of Public Instruction.

—— At the late dedication of the new high-school building of Rochester, N. Y., Supt. Ellis ably advocated the high school as an essential part of the public school system. He stated that lower education has never flourished without the aid of the higher. The high school is a powerful incentive to thoroughness in the lower grades, admission to it becoming at once the prize and reward of successful effort. It supplies the lower schools with teachers, and thus directly lifts up lower instruction. It exerts a most happy social influence, bringing together youth of diverse circumstances in life, and becoming a bond of union between them. But the glory of the high school is the fact that it equalizes the opportunities for a good education. Its doors open to rich and poor alike, presenting to all, irrespective of the accidents of birth and fortune, an equal chance. While the support of an efficient high school may add something to the expense of the public school system, it actually lessens the aggregate cost of education, including both public and private, and, at the same time, improves its quality. But the added cost of the high school is

less than is generally supposed, since much of the instruction it furnishes would, in its absence, be provided in the lower schools with less economy as well as less efficiency. Abolish the high school, and the entire public school system is crippled, if not paralyzed.

ASSAULTS ON THE PUBLIC SCHOOLS.

The public school system is just now receiving a vigorous attack along the whole line. The central attacking column denies the right of the state to educate, affirming that the state has no more right to teach its children to read than it has to teach them the common trades or to feed and clothe them. It is headed by the advocates of the doctrine that the Church has the exclusive and divine right to teach. It also contains that select party of quasi aristocrats, who ape the manners and borrow the ideas of the Tory aristocracy of England. Their unwillingness to pay taxes for the elevation of the people takes the form of a paternal solicitude lest the "working classes" be spoiled by education. They recently received a delightful morsel of comfort from Mayor Havemeyer, of New York City, who denounces the public school system as "a farce and a humbug", because "boys learn just enough to spoil them from [for?] being good workmen."

The attacking column at the right denies the authority of the state to teach any branches except those which are strictly elementary, as the common English branches. It contains those who believe that religion and higher education should not be divorced, but who see no special objection to the banishing of religion from the elementary schools supported by the state. They include the managers (not all) of denominational academies and seminaries, and those who advocate an increase of these institutions as a means of denominational growth and advancement. They are headed by that portion of the religious press whose range of vision has been narrowed by a constant and solicitous watching of denominational interests. This column also contains those self-appointed guardians of working people, who concede that a *little* learning may be a safe and good thing for the children of toil, but who see great danger in their "*over*-education." They assert that high schools are spoiling children who should work for a living, and, at the same time, they deny that such children attend high schools!

The column at the left contains a motley crowd, headed by the old fogies and the Rip van Winkles, whose opposition to modern ideas and institutions comes "by natur." They lament the advent of so many "new-fangled" methods of teaching, and declare that nothing can save the common school but a restoration of Webster's Speller, the English Reader, Pike's Arithmetic, Murray's Grammar, and quill pens.

These three columns are supported and flanked by squads of assailants, who have faith in nothing that exists, and who see in every insti-

tution of civilization the prolific cause of all the ills that afflict man and society. They believe in abolishing things generally.

Notwithstanding the noise and smoke of the conflict, the public school system is in no special danger. *The people are behind its ramparts!*

SCHOOL RECORD OF OHIO FOR 1873.

The annual report of the State Commissioner of Common Schools of Ohio for the year ending Aug. 31, 1873, contains very full statistical tables from which we select the following important items:

Number of school officers in the state	39,922
Number of school districts	1,900
Number of subdistricts in township districts	10,662
Number of schoolhouses in township districts	10,687
Number of schoolhouses in other districts	1,007
Number of schoolhouses erected in the year	542
Cost of schoolhouses erected and grounds	$1,008,786
Total estimated value of schoolhouses and grounds	$17,659,276
Number of unmarried youth between the ages of five and twenty-one in September, 1872	1,073,274
Number of unmarried youth between the ages of *six* and twenty-one in September, 1873	991,708
Number of youth between the ages of sixteen and twenty-one in 1873	236,965
Number of pupils enrolled in public schools in 1872–73	689,267
Average number of pupils in daily attendance	407,917
Number of different teachers employed	21,899
Number of teachers necessary to supply the schools	14,875
Number of teachers employed the entire school year	7,248
Number of local superintendents employed	223
Number of different applicants for county certificates	23,981
Number of different applicants rejected	4,543
Average number of weeks primary schools were in session in township districts, 26; in other districts	27.97
Average monthly wages of teachers in townships, not including high schools,—male, $38; female	$27
Average monthly wages of teachers in other districts, not including high schools,—male, $55; female	$35
Receipts from state tax (one mill)	$1,486,793.40
Receipts from local taxes	$5,252,550.92
Receipts from interest on irreducible school funds and rents of school lands	$231,276.58
Receipts from fines, licenses, etc.	$233,400.28
Receipts from sale of bonds	$501,583.96
Balance on hand Sept. 1, 1872	$2,439,078.02
Total receipts	$10,144,683.16
Amount paid teachers	$4,305,801.58
Amount paid for local supervision	$131,956.48
Amount expended for sites, building, and repairs	$1,437,655.94
For fuel and other contingent expenses	$1,097,989.28
For interest on and redemption of bonds	$458,572.32
Total expenditures	$7,431,975.60
Average rate of local school tax in townships	3.46 mills.
Average rate of local school tax in other districts	7.14 "
Number of county teachers' institutes held	62
Cost of the institutes held	$12,590.72

A comparison of the above statistics with those returned the previous year, shows a decrease in the number of schoolhouses erected but a considerable increase in their aggregate cost; a decrease in the number of different teachers employed and an increase of 9,670 in the number of pupils enrolled; a small decrease in the number of weeks schools were in session in townships and a decrease of 6.21 (?) weeks in other districts; a decrease of $1 in the average monthly wages of male teachers in townships and an increase of $1 in the wages of female teachers; a decrease of $3 in the monthly wages of male teachers in other districts (not including teachers in high schools) and a decrease of $1 in the monthly wages of female teachers; an increase of $86,238.54 in the total amount paid teachers and an increase of $2,361.41 in the amount paid for local supervision; a considerable increase in the rates of local school taxes, both in township and other districts, and an increase of $318,791.84 in the amount raised by local taxes.

But the most interesting item in the returns is the enumeration of 1873, under the new law which fixes the school age from six to twenty-one years, and requires a separate return of the number of youth between sixteen and twenty-one. Taking the number between sixteen and twenty-one (236,965) from the whole number enumerated (991,708), we find that the number of youth in the state in September, 1873, between six and sixteen years of age, was 754,743, while the number of pupils enrolled in the schools was 689,267. The enrollment includes a few pupils between five and six years of age, enrolled in townships previous to the passage of the new law, and some 80,000 pupils over sixteen years of age. Next year's returns will present the enumeration and the enrollment on the same basis. We commend these figures to those who, in ignorance of the meaning of former returns, credited Ohio with from 200,000 to 300,000 unschooled youth, growing up in ignorance! If due allowance be made for the large number of pupils (more than half) who withdraw from the schools before the age of fourteen, and the considerable number who attend private schools, it will be seen that there are not many thousands of children in the state who do not attend school any portion of the year. But the number of such youth is sufficiently great to justify an earnest effort to bring them into the schools.

The table showing the number of pupils pursuing the several branches of study, is very suggestive. The number in reading was 557,553; in arithmetic, 407,412; geography, 176,130; English grammar, 143,056: composition, 87,942; drawing, 56,345; vocal music, 112,081; United States history, 16,962; physiology, 3,656; physical geography, 3,344; natural philosophy, 3,243; algebra, 10,432; geometry, 1,766; botany, 1,387; bookkeeping, 1,086; Latin, 2,289; Greek, 205; German, 14,188; French, 223. A comparison of these figures with those returned in 1865, shows a marked increase in the number of pupils in English grammar (!), composition, drawing, vocal music, U. S. history, geometry, and botany, and a considerable increase in the number studying physiology, physical geography, natural philosophy, Latin (1,865 in 1865), and Greek. There is a decrease in the number studying rhetoric.

SCHOOL INCENTIVES.

In every school study and good conduct are secured by the use of incentives, good or bad. Every act or purpose springs from some motive, the character of which determines the influence of the act or purpose on the pupil's moral life. If the pupil's motives be low and selfish, his moral nature will thereby be debased, and this is true whatever may be the appearance of his external conduct.

This view discloses the paramount importance of right incentives in school instruction and government—an importance not fully recognized, and a subject very imperfectly understood. It is not enough that the teacher manages to secure diligence in study and good order. The vital inquiry is, What *motives* does he appeal to in gaining these ends? If these are wrong, the result, however fair in external appearance, will prove to be like the apples of Sodom. There is, in brief, an inseparable connection between school instruction and government and moral training. Every exercise of the schoolroom enters into and affects the moral character of the pupil.

These statements show that it is not enough that the teacher secures diligence in study and good order. These results must be attained by an appeal to motives which quicken the child's sense of right and duty, and develop and nourish his higher moral nature. Neither a temporary interest in study nor external propriety of conduct can compensate for the sacrifice of those higher principles of character, which are of slow growth, but of abiding potency and value. It is an easy thing to hedge in a child's conduct by punishments and to urge him forward by artificial rewards, but when the restraining hedge is broken down and the temporary incitement is wanting, then is seen the need of the power of self-guidance and self-impulsion—an indwelling monitor and a never-failing impulse. The most dangerous of transitions is that which carries a youth from the restraints of outward control to the non-restraints of a condition of untried liberty. The school life of the pupil should prepare him to be a self-governing being.

With these principles in mind let us try to distinguish between right and wrong incentives, and determine the relative worth of the former.

The first and most obvious classification of incentives is their separation into *natural* and *artificial*. Natural incentives are those which spring from the nature of the effort or acquisition, following success or attainment as a natural result, if not a necessary consequence. Artificial incentives are those rewards or incitants which are thrust between the pupil and the natural results of his efforts. Their prime characteristic is, that they are artificial substitutes for those higher rewards which flow as consequences from all right action, and, as such, they become the immediate end of study and conduct.

Among the natural incentives are—

The joy of duty done.
The pleasure of self-control.
The inward reward of obedience.
The satisfaction of success.

The hope of future good.
The desire of knowledge.
The pleasure of its acquisition.
The satisfaction of overcoming difficulties.
The desire to excel.
The approval of others.
The approval of conscience.
The approval of God.

A little reflection will show that each of these incentives is the natural result or attendant of some duty or achievement of school life. The human soul is so constituted that every right act or possession brings with it a joy, a satisfaction, or an anticipation, and this is both a reward and an incitant. What is needed ordinarily to make this natural reward conscious and potent, is the assurance of full success or complete attainment. The child submits his acts or acquisitions to the superior judgment of parent or teacher. If approved, the assurance of success brings a conscious satisfaction, joy, or hope. His reward is thus made sure. For the same reason men seek the approval of their peers or superiors. They desire to have their success tested by some standard without and above them. Such approval removes self-distrust, and makes rewards operative and satisfying, which might otherwise lack potency.

This view enables us to place among natural incentives all expressions of approval which furnish palpable evidence of success. Among these are—

The expressed approbation of the teacher.
The attainment of an assigned standard.

That these may be natural incentives, they must be signs or measures of actual success, and must be so awarded and so received. When they become the *end* of the pupil's efforts, when he ceases to look up from the shadow to the substance, then they are no longer natural rewards. In some of our graded schools the desire to reach high marks is the "ruling passion" of the pupils. They study for "percents", and *cram* for "percents."

Among natural incentives we should probably also place—

An advancement in studies.
A promotion to higher classes.

These are the natural rewards of successful effort, and yet they may be so impressed on a school as to take the place of ultimate ends, thus becoming the most potent of artificial incentives, concealing or destroying those nobler rewards which border the path of duty.

Among artificial incentives may be included—

Prizes of pecuniary value, as books, medals, etc.
Immunities, as exemption from tasks, examinations, etc.
Privileges, as holidays, early dismissal from school, choice of seats, etc.

It is evident that neither of these three classes of rewards is a natural consequence of the pupil's success or attainments. They are all artificial and temporary substitutes for those rewards which are worthier and

more enduring. But they do not lack power. They may be so incorporated into a system of school management as to become its very life—the all-absorbing end of effort and desire.

It will be noticed that we have not included punishment among school incentives, natural or artificial. Its office is to restrain, to impel; it does not incite. It is the reserved force which is brought up when incentives fail.

This simple classification of incentives prepares the way for a consideration of their relative worth and proper use.

It will be generally conceded, we think, that natural incentives are intrinsically superior to artificial. They nourish and strengthen the higher principles of character and, at the same time, act through life, springing up spontaneously in the path of duty and success. If made potent in childhood, they usually remain effective in after life. Artificial incentives, on the contrary, are transient and treacherous. They allure in youth, but fail in life's needs and conflicts. The child always incited to duty by some prize, immunity, or privilege, depends in vain on such helps in manhood. When school days are over, if not before, knowledge must be sought for its own sake or for its uses, and neither integrity nor virtue holds in its hands a bribe.

These facts not only indicate the superior worth of natural incentives, but they show the importance of their use in the instruction and control of children. The teacher should appeal to motives that have an abiding power and value, and, through such motives, he should strive to quicken the pupil's sense of right and duty. Certainly, so long as natural incentives can be made effective in securing study and good conduct, they should be relied upon.

This suggests the proper use of artificial incentives. They are to be resorted to, if at all, as *temporary* expedients to lift up a pupil or a school to the plane of higher motives. A teacher placed in charge of a badly demoralized school, dismissed all pupils whose conduct was good a half hour before the regular time for closing school. This was done at first each half day; then once a day; but, as soon as she had the school well in hand, the practice was wholly dropped. We have seen whispering and tardiness checked in the same manner, the incentive of an early dismissal or a half holiday being used *to prepare the way* for better motives. It is evident that a dismissal before the close of school as a reward will prove, for such a purpose, much more effective than a detention after school. But to use such means when natural incentives can be made effective, is needlessly to sacrifice the higher principles of moral training. Incentives intrinsically wrong are, of course, never to be used.

It may be stated as a general principle that lower incentives are always improperly used when the higher would be equally effective. Lower incentives may be necessary and proper in controlling a school of savages, but as fast as the savage nature is overcome, the higher should be appealed to. The use of lower incentives should be temporary, and they should be made preparatory to those which are higher and nobler. Of two motives equally effective, the higher should always be placed before the pupil.

There is a difficulty in carrying out these principles in large schools, owing to the great difference in the character of pupils. Motives effective with the majority may fail to control or impel the minority, or *vice versa*. In trying to obviate this difficulty, teachers are liable to make the serious mistake of placing low incentives before an entire school, in order to reach a few pupils. The true course is to grade incentives up to pupils, and not pupils down to incentives. Here, as elsewhere, there must be a wise adaptation of means to condition, even at a sacrifice of unformity.

Among proper incentives most liable to abuse are merit marks and tickets—incentives in very general use in our schools. The true design of the Marking System, as it is technically called, is to give the pupil a definite and tangible *measure* of his success. To this end the character of his recitations and his conduct is marked daily on a numerical scale, and averages are made monthly, or oftener, showing his standing. The value of this record depends, of course, upon its accuracy. When it fails to indicate the pupil's actual success, it loses its historical character and misleads. The same is true of tickets when bestowed as evidence of the teacher's favor rather than of the pupil's merit.

But the special abuse to which merit marks and tickets are subject, is the making of them the immediate end of the pupil's efforts. In some schools "percents" are so magnified that they completely hide what they represent, and the pupils study and recite for them as if they were wages. Sometimes the attainment of a specified standard is rewarded by class rank, by a holiday, or some other privilege. The attention is thus diverted from the true ends of study; the pupil is tempted to cram, if not deceive; and the teacher to mark too high.

The above discussion shows why it is that some teachers fail to develop a manly and noble character in their pupils. They treat them as ninnies or savages, incapable of noble impulses, and callous to all appeals of conscience and right. The path of duty is hedged in with artificial rewards, and the way of disobedience is made to bristle with artificial punishments. Between the pupil and every duty is thrust some false incentive, as a credit-mark, a ticket, a holiday, or a prize, and this becomes the immediate end of study or aim of conduct. That such a system should fail to quicken the conscience or nourish a high sense of duty, is not strange. The pupil's moral nature is fed on husks.

EDUCATIONAL INTELLIGENCE.

—— When notified that a subscriber has failed to receive any number of this journal due him, we always remail it.

—— All new subscriptions for the Teacher may now begin with the July number, but we can supply back numbers from January.

—— It is expected that the meeting of the Ohio Teachers' Association at Put-in Bay, the first week of July, will be one of unusual interest. The programme is a good one, and a large attendance is expected.

—— THE School Board of Cincinnati is engaged in its annual consideration of the subject of retrenchment. It has the assistance of the daily papers, which have the advantage of not being responsible for the character or efficiency of the schools. The *Commercial* easily figures out a reduction of $47,000.

—— WE referred our correspondent last month to Webster's Quarto Dictionary, page 53, for the pronunciation of *my*. We should have referred to page XLIII, §35.——Rev. R. T. Cross has charge of a church in Hamilton, N.Y., not Madison as was stated in our May number. Hamilton is the seat of Madison University.

—— WE learn from the *Maine Journal of Education* that there have been about one hundred and fifty applications for admission to the Anderson School of Natural History, but not more than fifty students can possibly be admitted. The necessary buildings have been erected, but there is very little money left to carry on the institution.

—— SUPT. A. J. RICKOFF, of Cleveland, has been unanimously reappointed for two years, with his present salary, $4,000. Supt. D. F. De Wolf, of Toledo, and Supt. R. W. Stevenson, of Columbus, have each been unanimously reappointed, with present salary, $3,000. Each of the above cities is to be congratulated on the continuance of the present efficient supervision of its schools.

—— A COUNTRY teacher wishes to know whether there are high schools in Ohio free to any resident of the state. Our public schools, including the high schools, are free only to the residents of the *district*. Pupils who reside without the district are usually charged for tuition. We hope the time may come when Ohio will have free normal schools for teachers who may wish to improve their qualifications.

—— THE Principals' Association of Chicago has devoted two successive meetings to an earnest discussion of the subject of oral instruction in the public schools. A resolution declaring, in effect, that much of the time spent in oral instruction is wasted, was adopted at the last meeting. Supt. Pickard proposes so to modify the course as to avoid the objections urged against the present system. The difficulty, we judge, lies in the fact that the oral and text-book courses are not properly *united*.

—— A COUNTY superintendent of Pennsylvania recently received this unique description of the solar system from a student of one of the normal schools, who was an applicant for a school. He said that he had "*finished*" geography: "The Solar System is that portion of the earth which surrounds the poles it is a cold sterile part uninhabited by man and little is known on account of the ice and cold obstructing the advantages of exploration. The distance from the poles extends 23½ degrees."

—— MR. JOHN D. PHILBRICK, superintendent of the public schools of Boston, has formally declined to be a candidate for reëlection, feeling that it is time to have relief from over-work. He has filled the office for

upwards of seventeen years, with the ambition to help make the schools of Boston equal to the best in the world—a result happily realized. Mr. Charles M. Cumston, head-master of the English High School, has also declined to be a candidate for reëlection. He has served the city as a teacher, in different positions, for more than twenty-five years.

—— A SUBSCRIBER (W. B. F.) informs us that the "day line", referred to by Merrill in the April number, passes through Behring Strait. When the Sabbath bells ring in Alaska, it is Monday across the strait in Asia. In sailing west a day is *added* when the "day line" is crossed. She wishes to hear more on this subject from a scientific stand-point. We refer our correspondent to a discussion of the question, "Where does Sunday begin?" by W. D. Henkle, in the OHIO EDUCATIONAL MONTHLY for March, 1869. It is shown in this article that there is no day line.

—— REV. A. D. MAYO, of Springfield, Mass., has been delivering courses of lectures on education in the State Normal Schools at Westfield, Mass., New Britain, Ct., and Providence, R.I.——Dr. Thomas Hill, now of Portland, Maine, has written a series of interesting reminiscences of the late Professor Agassiz, in the form of a letter.——Prof. Zalmon Richards, widely known as an educator, has established an agency for claims in Washington, D.C.——Prof. L. S. Thompson, of Sandusky, O., is superintendent of drawing in the public schools of Sandusky, Oberlin, Elyria, and Fremont.

—— NINETY-SIX of the students in the three lower classes of Bowdoin College, Maine, were sent home on the 26th of May for refusing to participate in the military drill required by the rules of the governing boards, but most of them subsequently renewed the matriculation pledge to obey the rules of the college, and were permitted to return. It is expected that the drill will be abolished at the close of the present term.——Eighty-six of the members of the Freshman and Sophomore classes of Michigan University were lately suspended for hazing.—— It is reported that the Jubilee Singers have raised $50,000 in Great Britain for Fisk University.

——THE *Pennsylvania School Journal* for June is responsible for the following: "Ohio has resolved not to allow women a place on school boards. The Buckeye state will do better when more highly civilized." We do not know when Ohio thus resolved. It must have been at least twenty years ago. The new Constitution, to be adopted or rejected in August next, makes women eligible to any school office, except that of State Commissioner of Common Schools. We believe that Pennsylvania reached this high degree of civilization only about one year since, and yet she was one of the "Original Thirteen."

—— MR. ALEX. FORBES, for several years past an agent of the publishing house of Scribner, Armstrong & Co., New York, has been unanimously elected principal of the new Cleveland Normal School, at a salary of $2,500. The school will be opened next September in the school

building on Eagle Street. The school is to be congratulated on Mr. Forbes's acceptance of the position, and Cleveland on the prospect of so auspicious an opening of this important institution. Mr. C. B. Ruggles, of Cincinnati, succeeds Mr. Forbes as agent for Messrs. Scribner, Armstrong & Co. in Ohio, Kentucky, and Tennessee. Mr. Ruggles formerly served this house in a similar capacity, and his appointment to so important an agency is a fit recognition of his experience and ability.

—— THE revised announcement of the meeting of the National Educational Association, to be held in Detroit, Aug. 4th, 5th, and 6th, states that President Porter, of Yale College, will speak on the National University question, and that Prof. J. K. Hosmer of the University of Missouri, and Prof. James Orton, of Vassar College, will read papers on the question of coeducation. "What constitutes a Consistent Course of Study for Normal Schools" is the title of Prof. Ogden's paper. He is associate principal of the Ohio Central Normal School, not "Assistant Principal", as stated in the first circular. We are sorry to learn that none of the railroads, except the Detroit and Bay City, the Grand Trunk, and the Great Western, grant reduced rates of fare. The hotels will charge from $1.50 to $3.00 per day.

—— JUDGE VINCENT, of Erie county, Pa., in a recent charge, ruled that, though the authority to suspend or expel pupils from school is vested by law in the board of directors, the teacher has the right to exclude a refractory pupil temporarily from school. He supposed a case in which it would be the total destruction of all order for the teacher to await the result of a formal complaint to the board, and added, "if a pupil absolutely refuses to obey a rightful order of the teacher, in our opinion the teacher has a right to say, 'You can not have the privilege of attending this school until you obey this order; when you are ready to obey, the door is open for you to reënter.'" We have long held that the right to exclude temporarily a pupil from school was, in the absence of law to the contrary, inherent in the teacher's office, and that the exercise of this right under some circumstances is a necessity. The courts are with great unanimity sustaining the rightful authority of the schools.

—— CALIFORNIA is to try the experiment of compulsory education. The law which takes effect July 1st, provides that persons having charge of children between the ages of eight and fourteen shall send them to a public or private school for at least two-thirds of the school year of the district in which the children reside. Exceptions are allowed in cases of bodily or mental weakness, sickness or extreme poverty of parents, and when children have already acquired a good knowledge of the branches of study taught in the primary schools, or when they reside more than one mile by the nearest traveled road from the public school. The penalty imposed on parents and guardians is $20 for the first offense, and $50 for each subsequent offense. This law brings the school system of California nearer the Prussian model than that of any other American state. The text-books used in all the schools, and the course of

study and instruction are prescribed by a State Board, and even the questions used by county and city examiners in the examination of teachers are prepared and prescribed by the State Board of Examination, which has also power to grant four grades of state certificates. In no other state is teaching as fully recognized as a profession as in California. We hope soon to give an outline of its system of certificates.

—— A FRIEND in New York City gives us a brief explanation of the difficulty in the public schools of Brooklyn, vaguely referred to in the dispatches of the Associated Press. In his annual report the city superintendent, Mr. Field, asked the Board of Education to consider the advisability of doing away with mixed classes in the public schools, intimating, pretty broadly, that he was personally cognizant of many cases in which the worst moral results had been caused by bringing boys and girls thus into contact. This charge produced some excitement in the board and among the citizens. A committee of investigation was appointed by the board, and the principals, feeling that their reputation was to a certain extent involved, asked that the superintendent be required to state specifically what cases of immoral conduct had come under his observation. The investigation was conducted secretly and, as a result, the investigating committee has recommended that "mixed" classes be discontinued, as fast as it can be done. This seems to indicate that the superintendent's charges were to some extent, at least, substantiated, but our correspondent does not know to what extent or the nature of the testimony. We are promised a full statement of all the facts in the case as soon as they can be obtained. It is to be hoped that the investigation has ascertained the *cause* of this sad condition of things in Brooklyn, when the experience of all the larger cities in the West, where mixed schools have long been preferred, has disclosed no such result or tendency. Is the discipline of the Brooklyn schools at fault? We hope that the educational world may have the benefit of the facts involved.

IOWA.—Instead of abolishing the office of county superintendent or otherwise crippling the school system, as was feared, the recent legislature enacted two laws which may properly be characterized as "advanced" school legislation. The more important of these laws establishes a system of County Normal Institutes, and the other provides for the holding of "Industrial Expositions", as often as once a term and not oftener than once a month, in connection with each school in the state—an adoption of Miss Fletcher's suggestion. If we are not misinformed, the former institute law provided for the holding of a teachers' institute annually in each county, under the direction of the county superintendent, and made a state appropriation of $50 to each institute. This law has been so amended as to make county institnte a *normal* institute, with longer session and more systemstic instruction. The length of the session is left to the discretion of the county superintendent, except that it can not be less than six days. In most of the counties the institutes held this year will be continued from three to five weeks,

according to the amount of money available to defray expenses. The institute fund provided consists of the proceeds of a fee of $1.00 for every certificate issued to teachers, a registration fee of $1.00 for each member of the institute, a state appropriation of $50 to each county, and such additional sum as may be appropriated by the county board of supervisors. State Superintendent Abernethy estimates that, after the present year, the average institute fund of each county will be about $300, not including the appropriation made by the supervisors. The law provides that the institute shall be held at such time as the schools in the county are generally closed, and the attendance of teachers is optional. We believe that this law puts the institute system of Iowa in advance of that of any other state, though the state appropriation is much less than that in Pennsylvania and New York. The State Superintendent has vigorously entered upon the administration of the new institute system. An excellent circular to county superintendents, issued in April, was followed by a series of six district conventions of county superintendents, held in the month of May, in which the best mode of conducting the "Normals", as they are generally called, was the principal topic of conference and discussion—at least so we judge from the report of the proceedings of the convention held in Des Moines. As a result of these conferences, the State Superintendent has prepared a course of instruction for the normal institutes to be held the present year, chiefly in the months of July, August, and September. We learn from the Iowa *State Jonrnal* that these two school laws have initiated a revival of educational interest in all the counties. It calls upon the boards of supervisors to give full encouragement to the normal institutes, and upon parents to join in the industrial expositions and other visitations of the schools.

Omaha, Neb.—Four years ago the public schools of this rapidly growing city were wholly inadequate to meet its demands. They were accommodated (?) in a few wooden buildings, worth about $5,000 and affording seats for some three hundred children. To-day the valuation of the school buildings in the city is more than $300,000 and they afford seats for nearly two thousand children. The valuation of school sites in 1869 was $19,000; now their valuation is $90,000. The new high school building, erected at a cost of over $200,000 and completed in 1872, is claimed to be " without a rival among the public school buildings on the Continent." But the board of education has not exhausted its enterprise on brick and mortar. It has endeavored to organize a system of public schools worthy of the accommodations so liberally provided. To this end in 1872 they elected a city superintendent, wisely selecting Mr. A. F. Nightingale whose first annual report, now before us, would be a credit to the most experienced superintendent in the country. It presents a very full exhibit of the progress and condition of the schools, and discusses a great number of the more vital topics with marked vigor and in a progressive spirit. The schools enrolled last year 2,241 different pupils, and employed 36 regular and 2 special teachers. The total amount paid teachers was $28,479.75.

BOOK NOTICES.

No Sex in Education; or, An Equal Chance for Both Boys and Girls. By Mrs. E. B. Duffey, Author of "What Women Should Know", etc. Philadelphia: J. M. Stoddart & Co.

This is a spirited and indignant review of Dr. Clarke's "Sex in Education", which the author regards as a blow not only against the higher education of woman, but against her advancement in every walk of life, not strictly domestic. She boldly denies Dr. Clarke's position that girls need a periodic remission of labor and study, asserting that nature has kindly provided them with an extra supply of strength, vigor, and endurance to meet the demands of the catamenial function; that she has been lavish with the gift of vitality to girls for this very purpose. She holds that if a girl is allowed the same opportunity of physical development as a boy, and is equally free from the restraints and burdens imposed by fashion and society, that she will show equal powers of endurance. She believes that much of the evil referred to by Dr. Clarke is due to the fact that girls are not allowed sufficient out-door exercise and the freedom of a natural life. In brief, she holds that there is nothing in the physical organization of woman that forbids identical coeducation. There are a few incautious claims and admissions in the work, which weaken somewhat its positions. It is claimed, as an example, that girls far outstrip their brothers in study because it is their ruling ambition to receive the highest mark of merit, and so they enter with the whole force of their nature into their studies. It is true that this fact is attributed to their restrained life out of school, but it concedes the greater danger of over-study in the case of girls. Indeed, it seems to be generally overlooked in the discussion that the regimen of the schools must be adapted to society *as it is*. It is also asserted on page 14 that the splendid physical development of the Syrian girls, whom Dr. Clarke saw in a Turkish harem, "is never attained except at the expense of the intellectual and moral nature." This, as it seems to us, concedes an important issue, if not the main one. But the book is an earnest and effective defense of coeducation, whatever may be true of it as a review of Dr. Clarke's work.

A Brief Course in Geography. Philadelphia: Cowperthwait & Co.

This work is intended to meet the demand for a shorter course in geography than is presented in "Warren's Common-School Geography" and other geographies of like grade. The abridgement is effected by giving less details in all departments of the study, and by stating little in the text which the pupil can learn by studying the map—a valuable feature. Too much of the descriptive text in most school geographies is a formal statement of what is obvious on glancing at the map, and the pupil is thus told what a well-directed question would enable him easily to discover. The general plan of the work is similar to the "Common-School Geography", but we notice several new features and important improvements. The old plan of representing the political divisions by different colors is adhered to, and the maps are commendably free from details

which are not referred to in text or questions. The maps and illustrations are generally excellent. We do not see why Kansas and Nebraska are included in the section of the "Pacific States and Territories" in the map on page 23, and the excepting of Texas in Chapter VI, and Kansas and Nebraska in Chapter VII, strikes us as very awkward, if not unnecessary. The volume closes with a concise and yet very complete presentation of Apgar's well-known system of map-drawing. In mechanical execution, including typography, paper, and binding, the volume is a credit to the excellent taste and enterprise of the publishers.

TECHNICAL EDUCATION: What It is, and What American Public Schools should Teach. An Essay based on an Examination of the Methods and Results of Technical Education in Europe, as shown by Official Reports. By CHARLES B. STETSON. Boston: James R. Osgood & Co.

The object of this work, as stated in the introduction, is "to give a general idea of what has been done for the technical education of workmen in Europe, how it has been done, what the evident results are, and what it is there urged should be further attempted." It is mainly composed of extracts from governmental reports, but the author has added a few pages of remarks, generally well considered, on American education and the need of providing for the better technical and industrial education of the people. It is urged that the natural sciences, as chemistry, botany, and physiology, should be made "a distinguishing feature in popular education"; that drawing should have "a conspicuous place"; and that these modifications of the present system of public instruction should be supplemented by the organization of special schools, now so common in Europe, for the technical education of workmen. While we heartily approve of the general introduction of drawing and the elements not only of the natural but also of the physical sciences into public schools, we do not see the propriety of calling such instruction "technical" or "industrial." Physiology does not bear more directly upon "the great industries" than reading or writing, or arithmetic or geometry. The applications of the natural and physical sciences to the arts and trades can only be incidentally taught in public schools. We also object to the author's statement that the popular education of to-day may be described as "literary." More than half of the instruction of our high schools is devoted to the mathematics, the natural and physical sciences, and history. But these criticisms do not affect the value of the work as a compilation of official utterances and suggestions respecting a very important and too much neglected department of education. We can indorse all that is said in favor of a system of technical schools, but we object to the subordination of public school education to "the great industries." The first and highest work of the public school is to educate man as man and not as a workman.

THE BIRDS OF NORTH AMERICA. Drawn from Life, and Uniformly reduced to One-Quarter their Natural Size. By THEODORE JASPER, A.M., M.D. Columbus, Ohio: Jacob H. Studer, Publisher.

We have received the first seven parts of this great work, which, when completed, will contain about thirty-six parts, designed to be bound in

two volumes. Each part contains four beautifully colored plates, twelve by fifteen inches, and eight pages of handsome letter-press, printed on fine, heavy tinted paper. The two volumes are to contain illustrations and descriptions of over six hundred different species of birds known to exist on this continent, with a popular account of their habits and characteristics. The parts now published fully justify the high claims of the publisher. The work is sold by subscription only, at $1.00 a part.

PROGRESSIVE AND PRACTICAL METHODS FOR THE STUDY OF THE FRENCH LANGUAGE. Parts I and II. By F. DUFFET, Professor of Languages, Member of the "Association Polytechnique", Paris, and Author of Popular Method for Learning English. Cincinnati and New York: Wilson, Hinkle & Co.

Each of these manuals contains twenty-five progressive lessons, based on what seems to us an excellent method of so learning a foreign language as to be able to write and speak it. The method throughout shows the experience of a practical and efficient teacher, who knows the value of drill as well as instruction. The books are published in superior style, with flexible cover (limp cloth), a style of binding which might be more generally used in the manufacture of school books.

BOTANY FOR YOUNG PEOPLE. Part II. How Plants Behave: How they Move, Climb, Employ Insects to work for Them, etc. By ASA GRVY, Author of Gray's Botanical Series. New York and Chicago: Ivison, Blakeman, Taylor & Co.

This little manual is in a sense the supplement of "How Plants Grow", published some sixteen years ago, and widely used as a "Botany for Young People." It is written in the same clear and simple style, and embodies the same method of studying nature, a method which combines both observation and thought, the use of the mind's eye as well as the physical sense. It is a capital manual for young pupils who are beginning the study of plant life. It is worthy of the unequaled series of botanical text-books to which it has been added.

GEOLOGY. With Illustrations. By ARCHIBALD GEIKIE, LL.D., F.R.S., Director of the Geological Survey of Scotland, and Murchison-Professor of Geology and Mineralogy in the University of Edinburgh. New York: D. Appleton & Co.

This is the fifth of the "Science Primers", edited by Professor Huxley, Roscoe, and Balfour Stewart, and is one of the best of the series. The more elementary facts and principles of geology are explained and stated in a very simple and lucid manner, and yet there is no childish attempt to write down to the capacity of children. The manual is an 18mo. of 128 pages, and is bound in limp cloth, uniform with the other books of the series. It is well illustrated.

PENNEWILL'S DAILY AND MONTHLY REPORT BOOK for Graded Schools is designed for the use of superintendents and principals. It contains ruled and printed forms for a complete record of a system of graded schools for one year. It is a unique record, and will be found very convenient.

MESSRS. S. C. GRIGGS & Co., Chicago, have recently published several very valuable and popular works, including "Old-Time Pictures" and "The World on Wheels", by Benj. F. Taylor; "Getting on in the World" and "The Great Conversers", by Wm. Mathews, LL.D.; "The Trinity", by Rev. F. H. Burris; "Greek Syntax", by Prof. James R. Boise; and a "Manual of Gesture", by Prof. Albert M. Bacon. These books are all published in superior style. S. C. Griggs & Co. are becoming as distinguished as book publishers as they have long been as booksellers.

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NEW BOOKS RECEIVED.

THE AMATEUR ACTOR. A Collection of Plays for School and Home. By W. H. Venable, Author of "The School Stage." Cincinnati and New York: Wilson, Hinkle & Co. Price, $1.50.

PROGRESSIVE AND PRACTICAL METHOD FOR THE STUDY OF THE FRENCH LANGUAGE By F. Duffet, Professor of Languages, Paris. Part Second. Cincinnati and New York: Wilson, Hinkle & Co. Price, $1.00.

THE GREAT CONVERSERS AND OTHER ESSAYS. By Wm. Mathews, LL.D., Author of "Getting on in the World." Second Edition. Chicago: S. C. Griggs & Co. Price, $1.75.

THE WORLD ON WHEELS AND OTHER SKETCHES. By Benj. F. Taylor. Chicago: S. C. Griggs & Co. Price, $1.50.

SECOND BOOK OF BOTANY. A Practical Guide to the Observation and Study of Plants. By Eliza A. Youmans, Author of "The First Book of Botany." New York: D. Appleton & Co. Price, $1.50.

SCIENCE PRIMERS. V. *Geology*. By Archibald Geikie, LL.D., F.R.S. With Illustrations. New York: D. Appleton & Co.

SHELDON'S READERS: Sheldon's Primer, First Reader, Second Reader, Third Reader. By E. A. Sheldon, Principal of Oswego State Normal and Training School. New York: Scribner, Armstrong & Co.

PENNEWILL'S GRADED SCHOOL DAILY AND MONTHLY REPORT BOOK. By D. H. Pennewill, Supt. Graded Schools, Rockville, Ind. Price, by mail, $2.00.

HISTORY OF PEDAGOGICS: Twelve Lectures before the Cincinnati Teachers' Association. By W. N. Hailman, A.M. Cincinnati and New York: Wilson, Hinkle & Co. Price, 75 cts.

PAMPHLETS AND CATALOGUES.

Chas. Darwin: A Lecture by Rev. A. J. F. Behrends, Cleveland, O.
Kindergaten Toys and How to Use Them. By Heinrich Hoffman, Pupil of Fredrich Frœbel, New York: E. Steiger. Price, 20c.
Chivalrie. With the Rules of the Game. Worcester, Mass.: West & Lee.
Circular of the Massachusetts Normal Art School at Boston. First Year, 1873–4.
Ohio University, Athens, O. 1873–4. Rev. W. H. Scott, A.M., President.
Hiram College, Hirm, O. 1874. Burke A. Hinsdale, A.M., President.
Twenty-Fifth Annual Announcement of the Woman's Medical College of Pennsylvania, Philadelphia, 1874–5. T. Morris Perot, President.
Register and Catalogue of the University of Nebraska, Lincoln, Neb. Allen R. Benton, A.M. LL.D., Chancellor.
Youngstown Eclectic Institute, Youngstown, O. R. Courtney, A.B., President.
Ohio Wesleyan University, Delaware, O. Rev. L. D. McCabe, D.D., Acting President.
Kenyon College, Gambier, O., 1873–4, Eli T. Tappan, LL.D., President.
Otterbein University, Westerville, O. Rev. H. A. Thompson, D.D., President.

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THE

NATIONAL TEACHER:

A MONTHLY EDUCATIONAL JOURNAL.

Vol. IV. AUGUST, 1874. No. 8.

SEX OR NO SEX IN EDUCATION.

The question whether the sexes are to be differently educated or not, is far from being settled. The following suggestions do not claim to answer it definitely, but solely to represent a forty years' practice in teaching both the sexes by a teacher who started on his course with the belief that there is no *essential* difference in the perfectibility of the sexes.

In Asiatic schools and countries this question is not entertained at all. Wherever the sexual maturity of women begins with the tenth and is fully attained with the twelfth or thirteenth year of age, on an average, there woman is fore-doomed to a more or less servile position; her education to anything like that of man is, with rare exceptions, hardly possible. She can not show any mental aspirations; the rapid growth of her physical nature absorbing both time and force needed for higher culture. For it is a fact, well-known to educators, that the gentler sex ceases to make mental efforts, if a sufficient foundation for self-improvement is not laid before the beginning of womanhood.

It is with the advent in history of the white Aryan race, and more especially the Germanic family of nations, that the social position of woman rises, and her education becomes gradually equal to that of man. That race, when it started from its Asiatic cradle, found the more desirable portions of the earth's surface densely settled by the older races, the black and the

yellow, and the only direction in which it could spread, lay in the sparsely inhabited regions of the Northwest, where a more severe climate and the mighty forests of Eastern and Central Europe forced men into a more energetic exercise of all their bodily and mental endowments. Here the period of sexual maturity of woman sets in with the fourteenth year of age, on an average; here she acquired both time and force for mental aspirations. Besides, the mission of the Germanic family to conquer all the world, by developing all the latent energies of mind and body, could not be carried out without elevating the educational and social qualities of the female sex. This being understood at an early period of history, led to a better education of the sex, which was considerably checked during the Middle Ages, to be more and more revived in modern times.

This short glance at history goes far enough to prove that the education of woman was and is prejudiced by a one-sided experience, originating from adverse climatic circumstances. Woman suffers under the same prejudice under which the working classes and servile races have always suffered. They were not equally educated, or not educated at all, because there was no belief in the possibility of their education, and because the ruling class (or sex) was anxious to preserve its ascendency. But just as a riper experience has settled the fact that the working classes, and even servile races, can be improved by education, even to no limit, just so experience has established the truth that there is no *essential* difference in the mind of the sexes.

But what do we mean by essential difference? We mean that all the distinguishing mental qualities of mankind may be equally developed in either sex. We do not mean that the proportion in the development of the several forces can ever be the same in any two individuals, whether men or women. One individual will, even under the most uniform education, excel in force of will, another in logic, another in imagination, etc. One will, in spite of the all-sided strengthening of his mental faculties, become a better poet, another a better mathematician, another a better observer of natural phenomena, etc., than all the others. Just so women as a class will, even under a perfect equality of education, become better housekeepers, educators of infants, teachers of the young, nurses and economists, than men as a class.

There are two purposes of education, the *material* and the

formal. The latter aims at a development of every single function of the mind into full self-activity and power of self-improvement, and should precede the former; should, indeed, be the only one during the years preceding sexual maturity. The material purpose of education aims at a cultivation of special endowments needed for a special calling, which should begin with the period of sexual maturity, when all the special inclinations and powers have developed themselves sufficiently to indicate a person's fitness for a special vocation. Hence it is self-evident, that the formal education of both the sexes should be exactly the same—an education into true humanity; but that the material education should be proportional, *i. e.*, equal in quantity, different in kind. Yet it should be understood that inclination to, and freedom of choice of, a vocation be just as much respected in the one sex as in the other, and that no avenue to any calling in life should be closed, or rendered less easily accessible to one sex than to the other.

It is not for the men to decide what is "woman's sphere", and, as a consequence, what should be her education for that sphere. If the contrary principle be upheld, any one set or class of persons would have just as much right to decide what should be the sphere and education of all other classes. This means class-rule, caste-dominion, despotism of every kind. Every human being should have a sacred right to decide his own sphere and his education therefor, under the concurrent jurisdiction of his natural guardians, as long as he is not of age, under his sole right when of age, the guardianship to relax with the growing faculties for self-government of the pupil. These being self-evident truths, it is an intolerable abuse of power on the part of the male half of mankind to decide what woman is not fit for, and what she should not be educated for. Indeed, there is hardly any sphere of action in which woman has not yet excelled under equal chances with men; and just in proportion as the world grows up to a sense of justice to womankind, the number of women excelling in almost any sphere of human accomplishments rapidly increases. An incalculable amount of talent in women, which now is wasted, and with it of human happiness, which now is lost, would be utilized under an equality of education of the sexes.

It is, however, true that woman having, on an average, from one to two years less time for her "formal" education than man has for his, educational arrangements should take this fact into

careful consideration, lest the mental and physical health of the sex be seriously endangered. This can most appropriately be achieved, if a natural compensation is taken into account, to wit, that girls may begin their schooling generally one year before boys, being mentally awake at an earlier period, and that they be advanced somewhat more rapidly from grade to grade, being quicker on the whole than boys.

There is another physiological fact to be considered in coeducation: After sexual maturity has appeared, woman loses about one-fourth of her time by bodily indisposition, which reacts on her mental power. During these periods she should not be compelled to the same regularity in her studies as in the rest of her schooling time, or great mischief may result to her constitution. In those schools where instruction chiefly consists in assigning chapters from text-books to be committed to memory, and the standing of the individual pupil is adjudged according to the number of recitations more or less perfect, there exists a difficulty as to the equal treatment of the sexes, and there the ambition of the girls may tend to their overworking themselves mentally. But this is an argument, not against coeducation, but against its faulty methods. Suppose the drudgery of learning text-books *verbatim* by heart were superseded by rational instruction—objective teaching—and the daily recitations supplanted by examinations, both oral and in writing, at the end of each term, the girls would make up for their lost time in their periods of full health, and they could not easily be injured thereby. Even the young men would be benefited by doing away with the formal memorizing of text-books. The only reasonable mode of using the latter is for repetition of facts already learned in school by objective teaching. Those who insist that the periodical indisposition of women renders their coeducation perilous, prove too much. They prove that even in schools exclusively destined for young women, a strict class-system can not be upheld, or, in other words, that women can not be otherwise educated than by private instruction, which is at war with all pedagogical experience.

The facts furnished by history and experience are conclusive as to this point. In all Catholic countries where the coeducation of the sexes is paralyzed, where the girls of the well-to-do classes are reared to maturity in the convents, and those of the laboring classes are not at all or little educated, domestic hap-

piness and the home education of children are insufficient, and the material welfare and political power of the nation are greatly impaired. In all the Protestant nations where a greater share of education is accorded to women, domestic happiness and family education are better cared for, and material wealth and political power follow as a consequence. And even among the Protestant nations domestic bliss and material power grow proportionally with the better education of women, a rising in the scale being visible from Germany upwards to Switzerland, Holland, Scandinavia, England, and finally the United States. True happiness in wedlock will rarely be found but where the wife is at an intellectual level with the husband, so as to be able to appreciate the import of his professional calling, perhaps to assist him in its details, to share in his aspirations, cares, and anxieties, and in his philosophical and religious views and educational tenets.

It is remarkable how much kindergartening is productive of facility for perfect coeducation. Among children who are for two or three years members of a kindergarten after Froebel's model, the girls will invariably turn out a greater proportion of able and zealous learners in any department of study than the boys—equal age considered. At their fourteenth year they will equal boys of sixteen, if their subsequent education be equal. Grammar, geometry, algebra, physical geography, chemistry, and physics are not too abstruse, not at all repulsive to girls rationally educated; and if proper gymnastic exercises be connected with the school, they stand such mental efforts remarkably well.

From sexual maturity upwards, the girls should have an opportunity to go through a six months' training in the practice and theory of kindergartening, so as to be able to become good mothers. They should furthermore have a chance to learn of physiology, physics, chemistry, and botany, and finally of the arts—those chapters applying to the kitchen, domestic economy, the nursing of children and of patients, likewise gardening, vocal music, drawing, and modeling, All these branches should, however, not preclude the possibility of a special study for some profession. A course of universal history (combined with geography) would also be advisable for girls as for boys, *provided that it be real history*, not, as now too commonly, a congeries of garbled facts subservient to party or sectarian ends, or

of an infinity of facts which teach nothing beyond their own stupid existence.

The greatest detriment to the cause of education consists in the fact that the real educators (teachers and women) have little or no influence on the general organization of schools and education. If *they* could wield a paramount influence on school government, instead of politicians, sects, and men in general; if the real educators were as influential in their own sphere, as, for instance, physicians in theirs, it is safe to predict that the equal coeducation of the sexes would soon be a settled fact. Even if it be true, what sometimes is asserted, that educators as a class are apt to disagree in most issues of their profession, it can nevertheless be shown that this very lack of harmony of ideas is owing to their dependence upon more powerful influences. Placed between their principles and better judgment on the one hand, and the want of bread and butter on the other, their choice is rarely free. It would be far different, if, left to themselves, they could listen to the voice of the philosophy of their art, and to that of their own experience. Astronomers decide upon the manner of building observatories, of constructing their instruments and tools, and of using them. Chemical laboratories are not regulated after the whims of political parties, or any "powers that be", but according to the philosophy of the chemical science. Hospitals, sanitary laws, nay, even the private medical practice, are administered by experts from the contemporaneous standpoint of the science and the art of medicine, and so throughout all the dominions of science and art. Only and exclusively in pedagogy, the philosophy of the science and art is made subservient to outside influences, and the class or personal interests of laymen. Educators as a class have not, to any considerable extent, to decide how education should be administered. Their calling is a more or less servile calling, and this is the reason why teaching is no profession at all; why it is chosen for life by a very few persons only; why its candidates are as a rule not those best fitted for it by nature and education; why its practice is immensely behind its theory, which might almost be called perfection itself; and why its results are trifling in comparison with what they could be.

The advocates of coeducation should then, first of all, agitate to the effect that educators, as a body, should have a paramount influence in framing all educational institutions and laws according to the philosophy of their calling. ADOLF DOUAI.

Newark, N. J.

SUGGESTIONS ON THE TEACHING OF DRAWING.

It is the province of the common school to unfold uniformly and to their fullest extent all the powers of its pupils, so as to furnish them the elements of future usefulness and success. This can only be accomplished when none of the studies are turned into what is popularly termed "hobbies"—when to every one is allotted its full share of time and attention.

Of all the branches taught in our schools, none fares worse in this respect than drawing. Whenever time has to be gained (for any cause), drawing, that pedagogical step-child, is sure to be the sufferer. There exists, on the part of many teachers, a tendency to regard drawing as a sort of outside study, well enough to while away an idle hour, and to serve as a pleasant recreation from severer work. They regard it as totally unworthy of being ranked with the three "R's." Yet, in order to insure success, drawing must not be counted an isolated study of secondary importance, but must claim and hold its place as an integral part of the entire school system. Fortunately educators are beginning to discover their mistake in this direction, and to realize the importance of drawing as an educational factor.

The question, "Why should drawing be taught in our public schools?" has been discussed and ventilated to such an extent that little remains to be added to the arguments. In short, the aims of instruction in drawing may be enumerated as follows: To train the eye to a correct estimation of distances and proportions; to enable the hand to coin into lines the impressions of real objects and to translate into reality the fanciful combinations of a prolific imagination. Moreover, it proposes to cultivate the taste, to foster and to intensify the love of ornament and of the beautiful, and to impress habits of accuracy, order, and neatness on the mind of the pupil. Of what great value is a knowledge of drawing to the scientist, the mechanic, indeed to every person! A few strokes of the pencil will often express more and convey clearer ideas than pages of well-put words. Think, to cite an instance, of describing the human frame without illustrations. Whoever attended the lectures by Prof. Agassiz or Morse, will remember with pleasure the additional interest imparted to their subject by their rapidly executed, spirited crayon delineations.

A thorough systematic course of drawing, commencing at an early age, when there are fewer trains of thought occupying the mind, crossing and recrossing each other, and when the joints and tendons of the hand are yet flexible, will most surely accomplish these results; perhaps more.

The course of drawing suitable for common schools, which deal with the masses, must necessarily differ from that adopted in art and industrial schools. These aim at the education of a comparatively small number of artists and professionalists. In this latter case, individual direction with lectures to the entire class are preferred. In the former, as a rule, simultaneous class teaching will more surely and readily lead to acceptable results. Here a large number of children are to be instructed, not because they show an unusual aptitude for the subject, but because a faculty, existing in a latent, dormant state, is to be awakened and brought to the surface. The old-fashioned notions, that a special talent or genius is required in order to succeed in the study of drawing, are, we trust, exploded, and the real obstacles found to be apathy and want of perseverance on the part of the pupil. Some, of course, will advance more rapidly and with greater ease and will produce better work than others. Is not this the complaint in all the studies? Dislike for grammar or geography will never secure a release; why take such ridiculous excuses as sufficient cause for not studying drawing?

While speaking of erroneous ideas, it may be well to mention some that have obtained a firm hold on the mind of many, and prevail to an astonishing extent. There is, in the first place, the notion of drawing from the object, from nature. "Why not let the pupils draw directly from the thing itself, instead of giving representations of it?" is a question often asked. Only total ignorance of the subject can prompt such an inquiry. What would be your opinion of a man, trying to teach a primary class the rudiments of arithmetic by putting an intricate algebraic problem before them, or giving to his first-reader pupils the works of Milton or Shakespeare? No doubt you would promptly denounce such proceedings as insane, yet they are about as reasonable as it is to ask a child, just beginning to wield the pencil, to draw from the object. Be sure that you understand the meaning of "drawing from the object"! The child is required to sketch a picture, which shall present all the characteristics and be a perfect fac-simile

of the object, viewed from a certain point. This step from the concrete to the abstract, from fact to appearance, involves not only the knowledge that a body of three dimensions must be made to appear on a plane of only two dimensions, it requires, moreover, an eye trained to perceive the nicest proportions and relative positions of lines and angles. It needs, above all, a certain maturity of judgment. A child may have looked a thousand times along the railroad track, may have watched the rails approach and the ties grow shorter in the distance. Ask this very child to draw the picture of what it has seen, and the result will in almost every case be a miserable failure. It is difficult, indeed, to teach persons how to see with eyes wide open.

Another popular delusion exists, in regard to the so-called "inventive drawing." This method claims to enable the pupil to combine from the outset lines and curves into original figures of more or less beauty. Drawings that are labeled, "invented by pupil", are, however, for the most part, insipid, meaningless conglomerations of lines, tending to corrupt rather than to elevate the taste, and tolerable only for the amount of care and patience bestowed in working out their intricate labyrinths. Before something original and new can be expected, the pupil must have drawn and redrawn many forms, must have mastered the A-B-C of designing, must have become familiar with his building-stones. Add to this a thoroughly trained hand, which will readily and faithfully execute the dictates of the brain, and, all this being granted, you may reasonably expect and require original work, the fruit of protracted, severe, and patient labor.

There are, unquestionably, a few who will succeed in accomplishing work of considerable merit and excellent in its way, but these few, endowed with unusual talent, ought to exert as little influence on the general tenor of the instruction as the other extreme—those hopeless cases which are to be found in every class. The average ability must determine the progress of the entire class. Too much time is frequently spent in "working up" the best pupils. This is radically wrong. The backward children stand most in need of the teaching; precocious geniuses will break down every barrier, and advance under the most unfavorable circumstances.

The most important maxims of a rational instruction in drawing for common schools may be enumerated as follows:

1. *Simultaneous instruction of the entire class.* This by keeping all the pupils at the same work at the same time, will insure order and uniformity of work.

2. *The lesson must either be drawn as large as possible by the teacher on the blackboard or else provided in the shape of wall charts of sufficient size.* As a rule, the system of printed copies in the blank books can not be recommended, because the attention of the child is diverted from the subject and the charm of novelty worn off before the figure in its turn is to be drawn. A weighty argument for the adoption of large blackboard drawings, is the fact that the pupils are forced to reduce the size of the figure in copying, thus gaining an additional advantage.

3. *Each exercise is to be fully explained in all its details, before permission is granted for copying it.* Attention is to be called to the characteristic points, the proportions, the size, etc., the resemblance to familiar shapes referred to, and the features, distinguishing it from other forms explained.

4. *Every lesson must become the mental property of the pupil to such a degree as to enable him to reproduce it any time from memory without assistance or directions.* Drawing from memory has been neglected entirely too much, if its value as a means of ascertaining the results of the instruction given and its influence in calling forth habits of close attention and retention are taken into consideration. If a pupil is able to draw a form from memory, it is a proof that so much has been gained and stored away in the mind for future use. Drawing from memory forms exceedingly appropriate home-lessons. If these tasks are allotted, the teacher will do well to allow some scope for the display of originality. Encourage the child in attempts to vary the figures a little, to combine several into larger ones, be these attempts ever so simple. Thus the way will be imperceptibly paved for future instruction in designing and inventing.

5. *Every new lesson ought to be a step forward, not a retrograde movement; containing enough known elements as not to be entirely new and enough new points not to be altogether old.*

How to commence the instruction in drawing properly, is a question of the utmost importance, involving necessarily success or failure of the entire class. The following suggestions may prove of advantage as a guide having been found to stand the ordeal of many years' practice:

The dot should be taken as the starting point. Its execution involves hardly any mechanical difficulty. Through combinations of dots a great many different and, to some extent, pleasing exercises may be obtained, that will train the eye to a remarkable extent. Thus the subject of these introductory exercises is easy, copious, and educating. Development of ideas of position, distance, number, and division constitutes the leading principles of these lessons. Next comes the drawing of straight lines in different directions; first horizontal and vertical, then oblique lines, of different but definitely stated length. Gradually these lines may be united to the forms of regular geometrical figures. Many drawing series present the various figures arranged according to the number of their sides, ignoring the fact that the difficulty of these shapes does not by any means depend on the number of their sides. For example, the hexagon, octagon, and even dodecagon are by no means difficult of execution. The equilateral triangle requires more practice, and the pentagon is a figure of excessive difficulty, if asked to be drawn without the use of instruments. The same objections apply to the division of lines, several prominent drawing systems follow the numerical order of division into 2, 3, 4, 5, and 6 equal parts.

That even the simplest elements may be woven into beautiful combinations is proved by the numerous antique patterns, known as the meandrian lines, more generally known under the name of key-border. The endless varieties of these graceful designs are generally nothing but repetitions of horizontal and vertical lines in a certain fixed order. As soon as the pupil has acquired a certain dexterity in the drawing of straight lined, easy geometrical shapes, he may commence the practice of curves. A wide field of study opens before him. The straight line and the curved line in their infinite variations and modifications form the contours of every animate and inanimate body. Let no pupil suppose, however, that because he can draw straight and curved lines moderately well, he has mastered the language of form. He has done this no more than the tyro, who can pick up his letters, but is totally ignorant of their proper connection.

After these elementary exercises have been satisfactorily accomplished, the question arises: "What is to be taken next?" Is the pupil to be directed to reproduce the manifold pictures of household furniture and kitchen utensils, landscapes and flow-

ers, which adorn most of our drawing-books? Emphatically no! Geometry ought to form the foundation of all true free-hand drawing. The geometrical shapes are based on strict unalterable laws admitting of being explained and verified. Every error, however slight, will be at once detected, and thus the student is tied down to the utmost accuracy and exactness. A square, for instance, must be minutely true in the length of the lines and the size of the angles, or it will not be a square. It matters very little, in copying a landscape, if a dozen or so of lines are omitted, or, if in a representation of a bouquet, the respective positions of the flowers are considerably changed. Mathematical exactness, on the one hand, is contrasted with great freedom on the other. Individualized, nature-like copies of animals, flowers, etc., are to be banished completely from the school-room, and their place is to be filled by conventionalized, symmetrical representations, adapted from prominent types of the organic and inorganic world. This resolution was passed by a convention of German drawing-teachers, held at Berlin, April, 1870, and is sanctioned by the new programme of instruction for Prussian common schools of October 15th, 1872, which makes drawing a compulsory study for all the schools of that monarchy. According to these maxims, the designs for the work of our public schools would have to be arranged from natural forms partly, (an inexhaustible supply being found in the shapes of leaves, flowers, sections of seed vessels, crystals, snow-flakes, etc.,) adapted to a geometrical plan, and partly to be derived from the imagination, the graceful ornaments of the Greeks, the interlaced ribbon-work and the exquisite Arabesques of the Moors, as well as the mosaics and parquetry-floors of the middle ages, being never-failing sources of reference.

Throughout this entire course, outline, the soul of free-hand drawing, should predominate. Lines of the utmost smoothness and of unvarying strength must be insisted upon. A commendable practice is the adding of line-shading, the so-called hatching, to the figures, as it improves the appearance, besides affording a great deal of valuable practice to the pupil. Highly finished, smooth shading does not properly belong to the common school. Its value is not at all in proportion to the time spent in its execution. Remember that the object of teaching drawing is not the picture produced. This is only a means to the end. The proper motives are identical with those prompt-

ing all elementary instruction, viz., a desire to awaken and to train harmoniously all the faculties of the human mind.

Cincinnati, Ohio. HENRY H. FICK.

TEACHERS AND TEMPERANCE.

The most hopeful field for temperance effort is among the young. It is hard work to reform a drunkard, and when he is reformed, it is hard work to keep him so. But it is comparatively easy to train a child in temperance principles. The most important place in this work of training belongs to the parent. If all parents did their whole duty in this respect, the curse of intemperance would cease in the next generation. But many parents will not do their duty, and hence, in order to reach the children of such parents, and also to continue and deepen the impression made on other children at home, the teachers in our public schools must take up and carry on this work among the young. Next to parents teachers can do more for the cause of temperance than any other class of persons, for next to parents, they control the stream nearer its source than any other. If the teacher's heart is in the work, there are many ways of laboring. It is my object in this article to suggest some of the methods that the teachers can employ to create a strong temperance sentiment among his scholars.

Some teachers have the excellent practice of giving to their scholars every day a familiar talk of five or ten minutes on some scientific, historical, or other interesting subject. Any teacher with a very little preparation can give several such informal talks on temperance. The statistics of liquor selling can be given; the evils of drunkenness pictured; the drunkard's home described; the methods and results of the woman's crusade set forth. Any number of topics for short talks can be found. Or temperance anecdotes and stories, such as can be found in almost any paper, can be read to the school from time to time. If the teacher is at all in earnest, such talks and readings will make a lasting impression on the minds of many children who hear nothing on the subject anywhere else.

Another method is to organize in each school or room a temperance society. It should have only a few officers and a short, simple constitution. The condition of membership should be

the signing of a pledge to abstain from intoxicating drinks as a beverage. Before signing this pledge, however, the scholars should be asked to secure the consent of their parents. Even if the novelty of such a society should wear off, it would do good while it lasted. At its meetings there could be temperance songs, declamations, essays, and dialogues. The National Temperance Society, 58 Reade St., N. Y., publishes books of temperance declamations and dialogues. If there is no society, a school exhibition could be devoted to that subject. If the teacher feels the need of help, he can easily find fellow teachers, or ministers, or others, who will be glad to give a short, interesting temperance lecture to the school.

The scholars can also be encouraged to make a temperance scrap book, either each one for himself or all together for the school. Plenty of material can be found for it in the weekly papers taken by their parents. For one cent a number, or twelve cents a year, the Youth's Temperance Banner, a beautifully illustrated temperance paper for children, can be put in each home. There should at least be a copy in each school.

These are only some of the many ways in which teachers can work for temperance. It takes time and trouble, but if only one boy is kept from becoming a drunkard, or one girl saved from the agony of being a drunkard's wife, it is time and trouble well invested. Or if, by such efforts, one boy or girl is stirred up to become an active temperance worker through life, it pays a thousand times over. Teachers, try it, and God will bless your efforts.

Hamilton, N. Y. R. T. Cross.

SPELLING.

Teachers seem to be pretty well agreed on two points with reference to teaching spelling. First, that it is acquired chiefly by the *eye;* and, secondly, and naturally following from this, that an injury is done whenever a pupil *sees* a word spelled incorrectly. The same principle holds, of course, in oral spelling. *Hearing* a word spelled wrong is only a less evil, because the impression upon the *ear* is less permanent than that upon the *eye.*

Now, how can we, to the geatest extent, avoid incorrect spelling in our recitations? In oral spelling, the pupils hear a diffi-

cult word spelled wrong three, four, or a half dozen times, and right once. Which will make the most lasting impression, especially when the pupil can see no *reason* why one is wrong and the other right? The same may be said of written spelling from memory. If he spells it wrong, and then corrects it, the eye—so far as that lesson goes—is as much accustomed to the wrong as to the right. But how can this liability be avoided?

Suppose that we give up oral spelling from *memory* entirely, and let the pupil spell with the words before him. This will require him to *look* at the printed words as a whole, and to see and hear the letters and syllables in their due order. Then let him write the words, not from memory, but from the book. This will keep his eye still longer upon the printed word, and show him how it looks when written.—*The Mass. Teacher.*

OHIO SUPERINTENDENTS' ASSOCIATION.

The sixth annual session of the Ohio Superintendents' Association was held at Put-in Bay, June 30, 1874, opening at 10 o'clock A.M. The Association was called order by Mr. A. B. Johnson, chairman of the Executive Committee, and prayer was offered by Rey. James Brand, of Oberlin.

The president, Supt. R. McMillan, of Youngstown, being absent on account of affliction, Hon. W. D. Henkle, of Salem, was elected president *pro tem.*

On motion of Col. D. F. DeWolf, of Toledo, a committee of three was appointed to consider the question of making the Association a section of the Ohio Teachers' Association. Col. DeWolf, of Toledo, John Hancock, of Cincinnati, and M. R. Andrews, of Steubenville, were appointed members of the committee.*

Mr. S. D. Barr, of the West High School, Cleveland, who was announced to read a paper on "Higher education", being absent, by request of the chair the discussion of the subject was

* NOTE.—At the meeting of the Ohio Teachers' Association, held July 2d and 3d, 1873, the Constitution was so amended as to provide for the organization of one or more sections, and the Executive Committee was empowered to act with the Executive Committee of the Ohio Superintendents' Association in the formation of a Superintendents' Section, but the latter committee had not the necessary authority to act.—EDITOR.

opened by President Tappan, of Kenyon College. After the discussion it was ascertained that Mr. Barr had sent his paper, and it was voted that it be published with the proceedings.

HIGHER EDUCATION.

BY S. D. BARR, CLEVELAND, OHIO.

By higher education is commonly understood that received in the higher grades of our schools. In our judgment, the analysis may be pushed still farther. In higher education, thus defined, that is *higher* which bears more directly upon those powers and susceptibilities which are most potent in exalting us, and in energizing and stimulating us to work unselfishly and for the highest ends of humanity.

Two prominent objects in education are the acquisition of knowledge, either scientific or mere information, and the development of power, either purely intellectual or moral and æsthetic. That scheme of education is best that aims at both these objects, and regards the twofold nature of each. It is often said that knowledge is power. If so, then are not bread and beef power? They are a means of physical power, but the living human body must digest and vitalize them, and build them into its own structure. So knowledge may gratify the intellectual appetite, but the soul must digest it, and extract therefrom the mental life-blood, and so build up and strengthen itself. The mind, then, may receive knowledge, and, like the body over-crammed with food, be only the weaker therefor. The aim, then, should be to induce minds to labor earnestly for this spiritual food, and, after gaining it, to extract therefrom whatever can nourish and strengthen. That man will prove a great benefactor of the race who shall teach us how so to instruct the young that they shall hunger for truth as they do for plum puddings, and so to aid their spiritual digestion that knowledge shall fully invigorate and strengthen them.

I am disposed to believe that in grades below our best high schools, the instruction is rapidly becoming more and more systematic, thorough, and complete. Teachers are growing into the habit of analyzing more clearly their subject-matter and modes of doing their work. They are careful that pupils take all the short steps in proper order, and know precisely where the steps are. But it has seemed to me that when this habit is continued too long, the *teacher* is apt to become unfitted for other work, and the *pupil* becomes over-cautious and weak, having neither ambition nor courage to put forth all his powers in any great effort, either in common work or in original undertaking. I am aware that the development of power and judgment *must* proceed slowly; but I must believe that it should *keep pace* with the acquisition of truth.

In my judgment, pupils leave the grammar grades for the high schools too young, unless they can be kept longer in the latter. They are too immature to derive the full benefit of the high-school course, and too weak to do first-class work. As our courses of study are now planned, taking into account the nature of high-school studies and the amount of work to be performed the first year, the step from an A

grammar grade to the D high-school grade is a long one, severely taxing the strength of some of the *best* pupils.

In this view, does not the question return with redoubled force, How may we best develop strength and judgment in our grammar schools? It seems difficult to lengthen the time of our high-school courses, without greatly diminishing the number of pupils, and running the risk of doing work too fragmentary. And yet we must find some remedy for the present evil. I am of opinion that we may safely go much farther in adding to the work to be done in the lower schools, — lengthening the time, of course. We are *now* teaching, in our *best* schools of lower grade, something of history, botany, physiology, physics, with music and drawing, and far too little of geography. In nearly every one of these subjects we must teach vastly more, and add still other studies. In this manner the course of instruction may, from the first, be made much broader than now; and if the added branches be thoroughly taught, such interest in them will be awakened that pupils will not be apt to lose their way between the grammar and the high school. Under such circumstances pupils would enter the high schools at a higher age, with stronger judgment, and greater maturity. We should then be able to complete our present high-school courses in less time, with vastly better results, and could so extend our work as to include several of the most important subjects now omitted.

We are sorry to confess that, with the excellent schools of to-day, aiming so directly to prepare pupils for practical work, there seems to be, on the part of parents, an unpardonable failure to appreciate the full importance and value of higher education. I do most confidently believe that teachers are themselves largely accountable for this state of things. In all the lower grades every teacher should be all aglow with inspiration and energy, inciting pupils to press on to the higher grades and the high schools, eager as a mother preparing her children for a grand festival and sumptuous banquet. The teachers in the high schools should not fail to send multitudes to the colleges.

There is a spirit, growing in these days, which aims at what its possessors style *utility*. Those actuated by it glory in being *practical*. And would that they were truly so. But it is a true, though sad commentary on their scheme of education, to say, that it aims at only temporary success—success in business, in politics, or in gaining popular applause. Now we claim to place as high value as they on education that prepares for business; but, in our judgment, infinitely higher value attaches to that culture and discipline that regard us not as limited in our existence and action to this life, but work most assidiously to induce proper tone, views, aims, and aspirations, and to develop and give direction to the energies of the mind for its own sake. We are to live forever. And we are to be chained to ourselves, and find in ourselves and our own proper action our highest happiness and success. We are to enrich, plow, sow, and reap harvests from not merely earth's narrow acres, but we cultivate the limitless fields within us. True, we must labor for our daily bread to feed the body; but the injunction is imperative that we labor

for better bread, feeding the soul—the bread, indeed, of *life*. We shall not forever make butter and cheese, and grow cabbages, nor need them. We shall one day tread the star-paved realms, and peer into the wondrous plans of the Infinite. We shall feed upon truth, feel the luxury of blessing others, and inherit the universe.

But were our existence and action limited to this life, we should still hold to that scheme of culture whose aim is not simply to prepare us to compete successfully in coining money, building and operating railroads and steamships, and winning military victories, though all these interests are of high importance. Man is not merely a steam-plow, a mower and reaper, a steam-engine, or a user of these. He is something more: he is a *man*. As a *man* he has a *threefold* nature—physical, intellectual, and moral. That education is narrow and defective that aims at culture, neglecting any of these great departments of human nature and well-being.

The order of the Creator is, first, dead matter—pardon the expression; it is pregnant with life—and the forces operating upon it; then vegetable forms, with the laws and conditions of vegetable life; higher in the scale are animal forms, with new modifications and developments, with the conditions and laws of animal life superadded; towering above mere animal existence comes the intellectual being, tenanting the animal form—master and king over all below; and lastly, sovereign over all, stamping the being with the likeness of his Creator, the moral and religious crowns him *man*.

On this earth matter exists for the support and manifestation of vegetable life, vegetable life for animal life, the animal for the manifestation and well-being of the intellectual, and the intellectual for the purposes of the moral and religious. The development is continually upward; and the susceptibilities, the innate powers rise in importance at every step.

Such, then, is man, in his full, rounded being; and as such he is to be regarded in a proper scheme of culture—not as a cabbage, nor even as a gorilla, nor yet as a geometer or geologist, an agriculturist or astronomer, a breeder of fast horses or a scientist,—but as a *man*—high priest and lord over this lower world, allied to angels and to God.

We are to receive physical education and discipline, and study physical science, together with the forms, usages, and laws of business, that we may aid in ministering to the physical wants of ourselves and the state—that as individuals and as a state we may exist and gain material prosperity. But this end is not to be aimed at as ultimate. Individuals exist for a higher purpose—for intellectual and moral ends. The state exists for the protection of the rights and the promotion of the highest interests, the most exalted success of its individual citizens. Hence as the development and discipline of the intellectual powers of a people, and the refinement and invigoration of taste and sensibility are higher than material or business prosperity, the state should seek to promote and conserve the highest intellectual culture of all classes of citizens. Both reason and experience prove this to be the most enlightened political economy.

Again, as men ruin themselves and others by committing fraud, theft, robbery, and murder, not so often because they are *ignorant* as because they are *immoral* and *vicious*, it is the business of the state to aim at the *moral culture* and elevation of its citizens. And if the voices of history, from all along down the ages, ring in our ears any single truth more prominently and emphatically than another, it is that *not ignorance*, but self-gratification, vice, moral corruption, the general dying out of virtue from the hearts of peoples, have wrought the overthrow of empires and republics, and rolled back the tide of civilization and enlightenment.

We see clearly, then, that it is the high and imperative duty of every individual to seek his highest culture in every department of his nature; that, since the state is the association of the individuals composing it, not destroying or infringing upon any of their rights, and exists, in any given form, only through their will and for their highest good, it is the right, nay it is the imperative duty of the state to aim at the same high end made obligatory by the Creator upon each individual. Hence, finally, the right and duty of the state to provide higher education for its citizens is not a question of statistics or political economy, but one of original and imperative moral obligation. If it could be proved—which can not be done—that higher education could be provided more cheaply by individual or private enterprise than by the state, still the state would be held under firm obligation to assume control of and be responsible for this education.

Shall we not, then, take a wider view of our duties as individuals and as members of the state, and, opening our hearts wider, unite with new zeal in untiring effort for the broadest and highest culture of all men?

DISCUSSION ON HIGHER EDUCATION.

President TAPPAN opened the discussion as follows: There is a higher education. That education which is absolutely necessary in order to earn a living, we may call the lower education. It is the course of study chosen by a large majority of parents. Our attention has been called to the fact that in the cities a large portion of the children are withdrawn from the schools as soon as they have learned certain elementary things which are necessary to them in order to earn their bread and clothing. This is a practical course, including reading, writing, and a little arithmetic, and with this the children go out and go to work. The choice of this course by parents may be made under compulsion. If so we may be sorry for it; but in a great many instances it is made because the parents are unaware of the fact that there is a higher and better education—something that includes the lower and much more. This higher education aims at developing the child into a man or woman, with capacity to do the work that a man or woman ought to do.

In determining the character of this higher education, we must consider what is to be educated—a human being—and the objects which we have in view in that education. Upon these questions depend the means of education, the course of study to be pursued and the method

by which these particular subjects shall be studied. The object in view is the power to gain knowledge. I say the power to *gain* knowledge. I mean more than knowledge. I know that it is said by some excellent teachers, for whose judgment I have the highest respect, that knowledge is the object of education, and that when we know how to do a thing that this is power. It is a mistake, with all due deference to those to whom I refer. You might as well tell me that the power of the eye to see distinctly what takes place across the water at Middle Bass from the front of this building, is the same thing as the knowledge of the thing seen. You might as well tell me that the power to lift a great weight is the same thing as a knowledge of the ratio that a single pound avoirdupois has to a knowledge of the muscles necessary to the lifting. There is such a thing as the powers of the body, and such a thing as the faculties of the mind. The power I say, therefore, is to be developed, and the faculties of the mind can be strengthened and developed by exercise just as those of the body can be. I only refer to this as a very important principle which never ought to be lost sight of in any education, either primary or higher.

What are these faculties? The power to gain knowledge, and the power to keep it; the power to use the knowledge we have, to multiply and increase it by reasoning with reference to it. When we have gained and kept and used and increased knowledge, there is still a more important faculty than all these—the power *to impart knowledge* to others—the faculty of language. With this four-fold division of the powers having reference to knowledge, I would lay out a course of study and determine the methods of teaching.

A word now as to methods of developing these powers of gaining knowledge. First, how we shall improve our faculties of observation? I agree with those who lay so much stress upon the study of the natural sciences. But if we are to teach these sciences with reference to the acquisition of knowledge, we must always go beyond the book. But are we to teach all natural science to attain this end? Is the thing wanted in our higher education mere knowledge of facts? How much of this knowledge is used? How many facts of science are used in ordinary life? How many of the facts of botany or geology? All these facts are important to the scientific man, but there is an undue importance given to them as a preparation for practical life. It is often attempted in primary schools to cram thousands of separate and distinct facts of geography into the heads of poor suffering children, whereas, in my judgment, what we want is the power of gaining knowledge, secured by a judicious and carefully arranged course of instruction, having for its great object the teaching of children how to acquire knowledge.

In higher education we can go a step beyond this. I would like to see in our colleges and universities more election of studies. Students in the higher classes should be pemitted to select some one branch, to be studied in an elaborate and exhaustive way, the object of such study being not so much the particular knowledge of that branch as to learn how to gain knowledge by original research.

The discipline of the memory has been too much neglected for the last twenty or thirty years, and its value is greatly underestimated by the educational profession of this country. We have heard so much of the old-time cramming of facts, of the mere memorizing of the text—very properly criticised—that we have swung out to the opposite extreme and the discipline of the memory has been too much neglected. It ought to be cultivated more, and I would suggest that the best means of accomplishing this is the study of the best English classics. I regard the English classics more important than the classics of any other language. The memorizing of the best thoughts of the best writers in the very words of the original has been and is neglected too much in all our schools of all grades. [Applause.] We need more of this, particularly in our higher education.

We also need the strict reasoning of the mathematics. I have heard quoted with infinite zest the saying of the brilliant English essayist, whose friend derived such heartfelt pleasure and profound satisfaction from the contemplation of that wonderful truth, that the sum of the three angles of a triangle is equal to two right angles. My friend, who sits before me, used to take particular delight in putting this at me, when I was teaching the pure mathematics, but, after all, there is no other science in which we have true and perfect reasoning as in the pure mathematics. And I now believe that, if properly taught from the beginning, there is no study which the pure, healthy soul would more delight in than the pure mathematics, for there is no other study which presents the truth so perfectly pure and unmixed. If you can not sympathize with me in this, please pardon me for the expression of so much of admiration for my favorite study. The principal feature of mathematics is the logic of the deductive method which it perfectly presents. But the teacher of this science should know better than to require children and young persons to commit demonstrations to memory word for word. [Applause.]

The faculty of imparting knowledge—the last of the faculties that I named—is that which crowns the whole, and is the most important. The faculty of language is that with which our education begins, even when we leave the cradle. It is that with which our education proceeds year by year, and it is that with which our education is to be finished. What are the means of cultivating this faculty? What are the methods? The classics of our own language are first and most important, and then the ancient and modern languages. In a course of higher education, it is not the question whether we shall have the Latin and Greek in the place of the French and German, or whether we shall have the French or German in place of the Latin or Greek. At the present day with our improved methods of teaching, a finished education ought to include all of these four languages.

The modern languages, if we can accomplish it, should be taught at an early age, much earlier than they are usually taught. They should be taught, of course, according to those methods which are adapted to young children. Young children can acquire the pronunciation of for-

eign languages much more readily than adults. Instruction in the French and German languages, ought to be provided for in our large city schools. I hope to see the time when the French and German languages may be taught, at an early age, to all children whose parents intend to give them a classical education. It will not require much time to enable them to acquire a good pronunciation. I know this can be done, and that the time given is no loss from other studies. The pronunciation of the Latin and Greek is nothing. We do not know how to pronounce them. They are pronounced with all sorts of barbarisms, at least the advocates of each pronunciation say that the others are barbarous, and probably they are all right. [Laughter.] The object, therefore of studying the ancient languages is not to speak them, but they are studied for other and far better uses. Comparative philology is altogether impossible, I may say, without a scientific knowledge of these ancient languages. And here allow me to correct the common error, that the object of studying these languages is to gain a knowledge of their literature. This is one object, but not the main one. I would study those ancient languages for their grammar and structure. They have a peculiar grammar—one which differs entirely from that of our modern languages. The study of Latin and Greek is the bone of contention at the present day, but I am happy to be able to say that there is more attention paid to them now by the best teachers of the land than there was twenty years ago. The great wave of doubt respecting their importance, which passed over the profession at one time, is being followed by a more thorough and true appreciation of their value in higher education.

But is our higher education to be merely the acquisition of knowledge? Is there not something more? Is there not a higher education than that? Is there not the *power* to labor to be gained? There is something more than knowledge which should be aimed at in our higher education. When the king of Israel longed for a draught from that well of water which he knew so well, his friends, whose friendship had been tested in the hour of battle, volunteered, with sublime chivalry, to bring it to him. When he recognized how this act of theirs made this pure water too valuable, too precious for any human being, he poured it out as a sacrifice to the Most High God, sacrificing himself in the act. Is there not here a lesson which should be taught to all, young and old, in the lower or higher education? [Applause.]

Prof. GEO. A. CHASE, of Louisville, Ky., being called out by the President, said: I am afraid, Mr. President, that it is your remembrance of our intimate association in another state, some seventeen or eighteen years ago, that has induced you to name me, and I only rise to thank you for the partiality thus shown me. Perhaps fifteen years ago I could have talked freely on this subject. For the last twelve years I have had charge of a high school, and every year I am more and more puzzled with regard to this question of higher education, and I come here to hear what you men of Ohio have to say—men whose names are very familiar to me, for I read the educational journals, and I read the spelling books and grammars sometimes. [Laughter.] I do not like pure

mathematics as well as the gentleman who has preceded me, but I have read very able mathematical works by the authors of Ohio, and have come to learn. I sympathize somewhat with what I heard a gentleman express as early as 5 o'clock this morning, about the arrivals last night. Said he, "There was a perfect deluge of school teachers last night. The air was thick with Harvey's, Kirkham's, and Lindley Murray's grammars. It was almost blue. I began to feel a little troubled that we should have so much literature here, until at last came the lady teachers, then I forgot about the grammar." [Laughter.]

I have been inspired, sir, to think since I have come in here, but I do not choose to let my thoughts out, because they would be simply a repetition of what I have heard expressed. There is one thought, however, that I will suggest, and I would be very happy to hear remarks upon it. What is the *practical effect* of higher education upon our pupils? What ought it to be? I have charge of a girls' high school, averaging three hundred and fifty pupils a year. When I look upon the class of girls who have spent four years in it, the questions come up, What will they do with their education? What have they had done for them? What are they going to do for themselves with it? Will it produce the best results in these individual girls in their sphere of womanhood? Have I not failed to prepare them for the destiny which awaits them? In the care of the girls who come and spend one year or two years, and then leave, have they not almost misspent their time? Might they not better have stopped at the grammar school, and gone from it to the practical duties of life? This high-school education is, I confess, a problem to me, and if there is any danger to our public-school system, it lies right here. I think the vulnerable point of the system is the high school. If we fail to produce the highest and most satisfactory results in these schools, it will react upon our whole system of public education. The forcing of youth through the high school on the high-pressure system, may show well in reports, but I think we have reason to inquire whether we are not mechanically cramming the minds of the children with too much reference to tangible results shown by figures.

Supt. D. F. DeWolf, of Toledo: I am very glad to have heard the remarks of both these gentlemen, and am very glad that they have left me one point to make. This higher education does not begin in the high school, for the child five or six years of age is the subject of the application of the right principles of higher education just as much as a young man of sixteen or twenty-one. This higher education should begin in the primary school, and in the Sabbath school. As Mr. Tappan has told us, the children in these lower schools should be taught the English classics. The bosh and trash should be wed out of our school and Sabbath-school songs and out of much of our common-school literature and Sabbath-school literature, and the English classics should be substituted. [Applause.] I remember better than I remember anything else, what I learned in the Sabbath school, and in the old red school house in Clarksville in the state of Massachusetts, before I was ten years of age. The classics that I learned there, taught me by

those good men whose faces I remember, I hope I shall never forget. They were none of those jingling rhymes of the present day. They were just as good classics as people learn in the colleges and universities of to-day. While I may not have understood all that was taught me, yet as experience has come and growth in mind and sentiment and love has come, they have done me more good than anything that has ever been taught me since As a lover of the Bible I have always pitied the man who came to his maturity without knowing thoroughly *by heart* the Gospels, the Psalms, and much of the Epistles, and so I have many times pitied the man that did not know much of Milton, Shakespeare, and Young, and (in the good old-fashioned times) of Pollock, Crowley, and that class of writings which we were taught in our youth to read, and which I believe ought to be read by children now. I believe, then, that this higher education should begin with the child; that it should be taught in the school to commit this literature, to know it well, and have it stored in its mind to use on all occasions.

I believe besides that the other branch, spoken of by President Tappan, may be commenced in childhood. He doubted the utility of committing mathematical demonstrations to memory. I was asked whether there is any such practice as this in our schools. I believe that the pupils in the high schools are not taught to commit demonstrations in geometry to any great extent, yet are not children in the lower schools taught to commit demonstrations in common fractions and to commit formulas which they are not able to reproduce themselves? I believe this is done every day in almost all the schools in Ohio and other states. This is a matter of the utmost practical importance to every teacher and it certainly is to every superintendent.

I may be permitted to suggest that the gentleman from Kentucky need not be in doubt whether these principles of education correctly carried out from youth up, are of service or not. He need not doubt whether the continuance of youth in a proper course of study will result in more good than their stopping at the grammar school to go forth to do duty in practical life.

Mr. CHASE: Allow me to explain that I do not wish to be understood as having any doubt concerning the practical benefits of our high-school training, but as inquiring whether it may not be improved and made more valuable.

Mr. DEWOLF: I so understood you. I believe that this course commenced in youth, and built upon day by day, month by month, and year by year, produces palpable, manifest, and measurable results; and I believe this from my experience as teacher and superintendent. I do not claim to have original ideas of education. I claim to be the pupil of one or two of the best educators I ever knew, and when my friend, Mrs. Samuel T. Worcester was laid in the grave the other day at Nashua, N. H., I lost a personal friend who stood between me and Deity, as it were, in the way of culture, education, and knowledge upon this subject. Away back, more than twenty years ago, I heard from her lips these ideas that Mr. Tappan has presented to-day. I was then but a youth, and

was trembling between the thought of doing something for myself in the line of another profession, or doing something perhaps for somebody else in this profession. This philosophy of education, existing in her mind, she carried out from year to year in her instruction, and I felt that there was a grand work for me to do as an educator in building up character and mind. Gaining some ideas in that direction then and there, I formed my plans and have endeavored from that time faithfully to carry them out. These plans included the idea, that in the hands of every pupil, from the very first, must be kept some means of cultivating the memory. I was an advocate of the practice of giving children one subject of study, the chief and direct purpose of which is to cultivate the memory, and I am not afraid to stand by that practice to-day. Another idea is the cultivation of the mathematical power, and another is the cultivation of the power of expression. All these having been neglected in my own education, I have seen how important they are in a course of instruction, and having had occasion to test their value in classes taught from five to ten years in succession, I am perfectly satisfied with the results. But I only arose to express my gratitude to Mr. Tappan and Mr. Chase for their remarks, and had I only done this, I should have accomplished my purpose.

WM. WATKINS, of Dayton: This subject of higher education is one upon which I have reflected a good deal, and yet I find myself knowing less and less about it year after year, and growing less confident of my knowledge. In our best organized schools everything seems to be lovely and successful in the lower grades, but when we come to the high school we are not as successful as we have reason to wish. We teach in our common schools and in our best graded schools reading and writing with permanent success and the ordinary computation, counting, and commercial forms, very well, but when we get above these things, and attempt to give scientific instruction in our high schools, we are not, as it seems to me, by any means so successful. Why is this? It seems to me that there may be two reasons for it. The one is, that most of this education in reading, writing, and computation and calculation is of a mechanical nature. It is a kind of skill that lies, as it were, at the fingers' ends, at the outer door of the mind, and when we attempt to build a higher education on this foundation, we are not successful, or, as I do not wish to speak dogmatically, it seems to me that we have failed. I want to ask these older and wiser teachers whether these may not be the reasons: In the first place, our common-school instruction is too swiftly scientific. We reach the scientific period of instruction before the mind has received sufficient strength to be thoroughly scientific. The boy of eight or nine years of age may be able to count a long column of figures as rapidly or accurately as some persons at the age of thirty, and the little boy in our primary department, that has been in school but one or two years, often writes as good a hand as we do.

Mr. HENKLE: That is not saying much. [Laughter.]

Mr. WATKINS: Perhaps not. The first and second readers are artistically taught, and the reading is exceedingly natural, because we do not

aim at that artificiality of expression so often cultivated afterwards. But when this work is accomplished, is the mind capable of scientific arithmetic or scientific writing or scientific reading? I think not, for it seems to me that the scientific state belongs to a certain maturity of years. We are too swiftly scientific. We think that if a pupil can multiply or divide or subtract, can cast up a column of figures, and a few things like these, that we can build on this foundation the superstructure of scientific knowledge. Pupils of eight or twelve or thirteen years of age can not be made scientific arithmeticians, because to be scientific in arithmetic or anything else requires age and experience.

Secondly, we take the boy in the high school who has an acute arithmetical mind, but who knows nothing of geometric figures, and we endeavor to teach him the properties of figures in geometry in one hour, and to make him reason upon those properties in the next hour. We make the scientific reasoning follow too swifty upon the conception of the thing.

These are two reasons why our schools do not produce satisfactory results. The instruction is too swiftly scientific, and, in the higher grades, conception and reasoning are brought too closely together. Have we not also neglected the great constructive faculty of the mind? Has not the imagination been left out? Have we cultivated it in our schools? Do we cultivate it? And yet the imagination is the constructive faculty of the mind by which things are made real, by which that which is abstract, vague, and far removed from the sphere of our thoughts and the reality of our existence as the fleecy clouds that float above us, are brought near and are made real to us. We try to teach morals, and what are morals in the abstract, without bringing in the imagination and applying the moral truth directly to ourselves? It is not only in this, but it is in every one of our troubles in teaching geometry. My troubles in geometry have been pretty largely in the imagination. When I get hold of a pupil who has imagination, then I can teach him geometry. Four or five years ago I should have presented these views with a great deal of profoundness and assurance, but I am not nearly as sure as I was then.

JOHN HANCOCK, of Cincinnati: The statement has been made that there is no line of demarkation between the lower education and the higher, and the inference is, that if we have attempted to make one, it is entirely artificial. I doubt whether any one can say, this is the line, and all above is higher and all below is lower. Education is always a growth. I do not know whether my friend, Prof. Chase, is aware that we have had a grand old battle in this state between the advocates of the classics and the advocates of the natural sciences. The advocates of classical education, as the grand instrument by which men's minds are to be sharpened, had built up a great wall to shut out nature, and then had persuaded themselves and their fellows that all on the other side of that wall was of no worth; that, while those within the inclosure were moving over the grand old plains of classical culture to grand victories of the mind, and were true educators, those pretended educators outside

were only guerrillas. As time went on, the guerrillas increased until they became an army, and then the battle became strong. The scientists then built their wall to shut out the classics. A few who were not fighting especially on either side concluded that a good plan would be to pull down the walls, and make nature and the classics a common territory, and this was done, and the scientists looked on the other side, and, instead of seeing a barren plain, and everybody in it digging after Greek and Latin roots, they saw a grand temple of learning, magnificent in its proportions, beautiful to look upon, and with its walls hung thick with the pictures of nature, drawn by old Homer and Virgil, and other great authors of antiquity. The classical men began to look over upon our side (for I was one of the guerrillas), and, instead of seeing that nature was confusion, they saw that the pictures of nature were grander even than the pictures of mind, and they began to be in love with nature. It seems to me that this wall that has been built up between nature and man should be completely leveled, and that all branches of learning should be brought into harmonious relations with each other. [Applause.] I do not believe that any education, whether higher or lower, can be a harmonious and a profitable one, unless there is this blending. I believe in what my friend said of the imagination. When we bring flowers to the little child, we never fail to find an appreciation of the beautiful. Even the little "gutter snipes", as they call certain children in the city, will follow you, saying, "Mister, please give me a flower." These little ones have a story. There is something in the love of nature, as shown in the love of flowers, that is elevating. Should not education make use of this feeling? Let the child take its lessons from nature. Let it begin early, and never end. Some scientific men have shut themselves out from a wonderful power and a most delightful pleasure by confining themselves entirely to the deciphering of the hieroglyphics of nature, of grubbing in the ground without looking up; for, after all, grand as the universe is, it is not half so grand nor half so noble as the human mind may become. The thoughts of Homer, Plato, Shakespeare, Milton are grander to us than anything that we can see in nature. Nature and culture should go hand in hand, and we are coming to that.

What shall we teach? It seems to me that this question is about entirely answered, while we differ much as to the manner in which knowledge should be taught. We must have definiteness of knowledge, and, at the same time, we want breadth of knowledge.

Permit me to say one word on another topic, the coeducation of the sexes. If the principles that I have already enunciated be correct, if nature and the thoughts of the mind are to be brought together for the purpose of education, I can see no reason why there should be a difference in the education of the boy and the girl. A girl can see the beautiful in nature; she can learn all of nature's secrets, and she can enjoy finding them out just as thoroughly, it seems to me, as the boy can. On the other hand, music and poetry have as grand a significance to her, and philosophy reveals to her the same beauty that it does to the boy.

I can see no important difference in the course to be prescribed for the two sexes.

Mr. TAPPAN: Don't you think girls have a nicer sense of the beautiful than boys?

Mr. HANCOCK: I do.

Mr. TAPPAN: Then there is a difference.

Mr, HANCOCK: I did not mean to say there is no difference between men and women. I believe in the general principle of prescribing in general a similar course course of study for boys and girls. I acknowledge that women are made of finer clay than men, that their nervous organization is more acute, and that they enjoy the beauties of art and nature more than men. But whilst they do this, I would not deprive them of the strength they may gain from severe study, for I would have it always borne in mind that culture can not stand, and is almost worthless, that is not founded upon the solid superstructure of the sciences. I see no reason why girls should not learn mathematics, natural science, strengthening the mind and forming a foundation for the higher and more excellent culture that ought to be built upon that foundation. I will not say that the slender girl of sixteen can learn as much mathematics as the stout boy of eighteen in the same time. She must take so much more time, perhaps, in this severe study as to compensate for her physical inferiority.

I wish to say one thing here at the risk of repeating it before the Teachers' Association. I believe that the want of the time is, that a much larger proportion of our people be brought within the scope of higher education. I do not entertain that profound regard for the elementary branches that a great many do. They are, of course, necessary, essential, but they are like the wall of the cellar on which the building is to be erected. Stop with the cellar walls, and you have no beautiful or symmetrical structure. I judge from Mr. White's looks that he does not agree with me, but I feel that one great want of modern society is more thorough education, and this want must be met. As Mr. Lowe said in a late speech, the question long since ceased to be, "How many shall we educate?" and became, "How much shall we educate?"

President TAPPAN: I was much interested in the remark of Mr. Watkins. Every observing, thoughtful teacher must sooner or later encounter the practical question, How thorough, how scientific (to use Mr. Watkins' language) shall we attempt to make instruction in the elementary branches? Shall we, for illustration, when we teach the multiplication of fractions, attempt to teach all mathematical principles that bear upon that rule? If we do not attempt to teach all, how much shall we attempt to teach? It has been frequently said that instruction ought to be absolutely thorough, and that if you teach arithmetic you ought to teach all that bears upon the subject. No man or woman ever yet did it, for it can not be done. That simple mathematical proposition, that the product of two prime numbers can not be the product of any other prime numbers, is one of the most difficult and abstruse problems ever tackled by the greatest mathematicians of old. So difficult and intricate

is it, that we never find it in our elementary works. I say, then, that it is utterly futile to think of absolutely exhausting one of these primary branches. Then the question is, How far shall we go? I am satisfied that in teaching arithmetic to young children, we should often content ourselves with teaching them the how, the process. I know that I am saying something that many persons have denounced, insisting that we ought to teach the *why* as well as the *how*. In a great majority of instances we can not do it, for in some cases I am hardly able to understand the why myself. The young child reasons, reasons well, reasons logically, and will draw conclusions as well as you or I, but not consciously. The young child will make a general rule, as any one of you must have noticed. When a child follows a general rule of grammar with reference to some word which is an exception, he has followed the strictly Baconian method of induction unconsciously. The child reasons as philosophicallv as Sir Francis Bacon ever did. But shall we teach rules to children? It is all bosh (excuse the word). You may teach them a rule in grammar, and may have the rule repeated, and you may do the same thing in arithmetic, and you may teach them to tell you the reason why they do this and that and the other, but they have no conception whatever of the meaning of the words they use in a rule, or when they reason upon the matter in the professional way. What children do is to do a thing this way or that, because another thing was done this way or that. Show them how to do it, and they will do it again; but when you attempt to put this in words, you fail. They have reason, and reasoned well, but not consciously. Perhaps I ought not to speak *ex cathedra*. I would like to ask teachers of experience here, whether I am not correct in saying that children do not reason consciously until they arrive, as a general rule, at twelve or thirteen years of age, and that they ought not to be required to give the reason before that age. Many young children have been taught to give the reason for processes in arithmetic; but, so far as my observation goes, in most cases they give only *words*. They can not turn in and watch the operation of their own minds,—at least I have not found those that do. There comes a time when children are able to do this; some later than the age mentioned, rarely earlier. They then begin to notice what they themselves have done, and to generalize really and well, and then we may begin to call their attention to the operations of their own mind, or, in other words, to give them some practical lessons in logic, and they will make still further generalizations consciously. The difference between teaching the young child and the teaching of the more advanced pupil is not that the one is gathering all the while knowledge from observation, and then for another period of years with reason, and so on. This is a great mistake. Children two or three years of age reason and reason well, only unconsciously. Youth of seventeen or twenty reason just as well, and gather knowledge just as well as those of two and three, but they do it consciously. I think that this is an important difference.

E. E. White, of Columbus: It was not my intention to participate in this discussion, but Mr. Hancock's reference to me seems to make a few words necessary. I was querying in my mind whether the remarks

made by him on coeducation did not simply touch the question of the *equal* education of the sexes. This must have caused the expression of doubt, which he noticed. I indorse most heartily the statements made by him respecting the importance of higher education. What the nation imperatively needs is not simply that every person shall be able to read and write, as much as it needs this preparation for citizenship, but that the mass of the people shall be prepared to reason correctly, to think accurately, to decide public questions wisely and justly, and to obey the conscience in the discharge of public duty. The great body of the people need a much higher education than they now receive. When the time comes to discuss "The High School Question", I may take occasion to say, if in the spirit, that the high school is not only the vulnerable point in our school system, but that it is the *vital* point. The striking down of the high school will be a fatal blow to public education in this country. I hope that the discussion of this subject in the Teachers' Association will recognize the danger now threatening the public-school system. Take the attitude of the religious press as an illustration. The leading papers of nearly all the great religious denominations seem to be uniting in a denial of the right of the state to provide the means of higher education. They seem willing, however important the element of religion may be in the education of a child, to concede that it may be banished from the elementary schools, if the state will stop its educational work here, and leave all higher education to the churches. The motive underlying all this is evident. Academies and colleges are important means of denominational growth and advancement. But I am most annoyed by the fact that this fatal concession is made by those who have hitherto been the most earnest defenders and advocates of public schools; but I am not alarmed. I believe that the public school will come out of this conflict stronger than before, though in localities it may suffer loss temporarily. I will only add that too much importance relatively is sometimes attached to elementary education. I have often said, when called upon to address schools in different places, that two years of higher instruction and study are often of more practical value to a boy or girl as a preparation for life's work, than all that has preceded. This higher course seems to gather up and give practical direction to all that has gone before it. It is a great loss to a young person to leave school, say at fifteen years of age, with no knowledge of the higher branches. I therefore advise all young people whom I can influence, not to stop with an elementary education, if any reasonable sacrifice will enable them to go on.

Mr. HANCOCK: One of the objections urged against coeducation is, that boys and girls should receive different kinds of education, and hence should be educated in different schools. My remarks were intended to answer this objection, and I had no time to refer to any thing more than this.

At the conclusion of the discussion, the Association adjourned to meet at 2 o'clock.

Afternoon Session.

The Association met at 2 o'clock, pursuant to adjournment.

The committee appointed in the forenoon, presented the following report:

Your committee, after due consultation, respectfully recommend that the Superintendents' Association ask to be received as a section of the Ohio State Teachers' Association, the order of exercises and time of meeting to be under the control of the Executive Committee of the Ohio State Teachers' Association; but said Superintendents' Section to be allowed to elect its own President and Secretary.

The report was accepted.

The same committee was appointed to nominate officers for the Superintendents' Section of the Association for the ensuing year.

Supt. C. W. WILLIAMSON, of Wapakonetta, read the following paper on

SCHOOL SUPERVISION.

The few thoughts that I shall offer for your consideration, relate chiefly to graded schools, in which only a portion of the time of the superintendent is spent in teaching.

In the wide range of agencies employed in carrying on a system of instruction, supervision stands at the head. Its importance as a means of improvement is too well established to admit of discussion. An efficient system of supervision presupposes a clear and comprehensive view of the work to be accomplished; and an ability to adopt the most judicious means to reach the ends proposed. To be able to meet these requirements, a superintendent should study the character and wants of the community in which the schools are located, bearing in mind that "the education required by a people is not a fixed quantity; that, as the conditions of life change, the education of the people should undergo a corresponding change." His qualifications should also include an acquaintance with the school systems of other countries, states, and cities—their organization, government, and methods of instruction. It is true that a knowledge of the branches to be taught in the departments under his control is indispensable; yet it will be insufficient without that higher professional knowledge mentioned.

Without assuming to be able to define satisfactorily all the duties that may be classed under the head of supervision, I shall endeavor rather to present a few points for discussion than to attempt an elaborate examination of any one of them.

An efficient system of supervision should secure professional progress in teachers. To secure this, it is necessary that the objects to be attained and the plan of their accomplishment should be discussed in teachers' meetings until thoroughly understood. The course of study, government, and methods of instruction should receive special attention, leav-

ing the details to be discussed privately by the superintendent and teacher, or by illustrative teaching in the department where the work is to be done.

Each teacher should be made acquainted with the amount, kind, and quality of discipline and knowledge that is required to advance a pupil from one grade to another. The gradation should be so regular that a transfer from one department to another, should appear to the pupil as little more than a change from a lower to a higher grade in the same room. In the execution of methods of instruction free scope should be given to the individuality of the teacher, holding him responsible mainly for results.

The inspection of the work of teachers should be so searching that incompetent ones will soon see that their services are not acceptable, and that competent teachers will feel the necessity of availing themselves of every facility within their reach.

A proper regard for the interests of teachers and the school requires that public criticism of teachers of a personal or professional nature should be avoided as far as possible. A statement to teachers by the superintendent at the commencement of the school year, that any criticisms he may see proper to make will be made only to the individual interested, and to the proper official authorities, will generally prevent many unpleasant occurrences that otherwise would detract from the general harmony of the school. In summing up the year's work, let "honor be given to whom honor is due." If a teacher in a primary or grammar school has shown a reasonable or eminent degree of ability, let honorable mention be made of it. It is a matter of right that belongs to the teacher, and should not be disregarded by the superintendent.

No method of instruction can be made efficient until the school has been properly classified. This part of the work should be done in the main by the superintendent, as it furnishes information necessary to successful management of the school. For a similar reason he should make all examinations for promotion. A record of the entrance of each pupil, names of parents or guardians, attendance, absence, age, deportment, and record of examinations should be kept in the department ready for inspection at all times.

School government occupies a large portion of the superintendent's time in the class of schools to which we refer. As has been said by one of Ohio's School Commissioners, "it is too often the case that the superintendent is made a thrashing machine for the whole school." Comment is unnecessary. In many schools a large per cent of his time is spent in adjudicating petty cases that should be disposed of in the departments where they occur. The line marking the distinction between the offences to be reported, and those to be disposed of in the department is not distinctly drawn. This undefined state of affairs affords opportunity for sharp practice in school management—to express it in simpler language, for shirking responsibilities. For example, the superintendent may refuse to suppress an insubordination in a department, or to suspend a pupil for a gross misdemeanor, through fear

of making himself unpopular. This evil is carried to such an extent in the lower departments of some schools that there is hardly a case in the catalogue of school offences that is not sent up for correction. They go up singly and in squads. There are cases, however, that should be examined and disposed of by the superintendent. For example, difficulties arising between pupils of different departments, in which it is difficult to arrive at the facts until the parties have been brought together. Cases also requiring suspension from the privileges of the school should be examined by him before reporting them to the board.

There is another practice prevailing in many schools to which I shall call attention—the practice of moving pupils from a higher to a lower grade by way of punishment. This is a practice of very doubtful propriety. If moved at all, we suggest that they be sent to the superintendent's room to remain until reinstated.

In the class of schools to which we refer, the high school is generally in charge of the superintendent, in which in many instances he spends too much time in teaching. The statistics of the last report of the School Commissioner exhibit a want of uniformity with respect to the amount of time spent in actual supervision, varying, in schools of the same grade, from half an hour to six hours per day. Indeed, in many instances, the superintendent visits the departments once a week or once in two weeks, remaining five minutes in a department, as he has twelve rooms to visit and only an hour's time at his command. It is not to be understood, however, that he should spend all his time in supervision. As a general rule, the best managed schools are those in which the superintendent spends half or two-thirds of his time in teaching. Under the present management in many schools, a pupil may pass through all the grades in the course of study without coming at any time under the instruction of a male teacher. It becomes the more important, therefore, that a portion of his time should be spent in giving instruction.

Other departures should be made in the direction of helping children less, and requiring them to help themselves more; reducing the number of text-books and placing a greater dependence on the originality of the teacher.

In conclusion, there is such a thing as too much supervision—a surveillance so irksome and exacting in its nature as to reduce teachers to mere operatives. Constant intermeddling with the methods of instruction in a department is as bad or worse than no supervision.

It is necessary in the developing processes of our systems of education that those who control the schools, should possess not only scholarly attainments, but ability to generalize, and adapt themselves to the rational tendencies of each new phase as they arise; "that they should be masters of the situation", making our state system of education worthy of the state—rich in its bounties as the deep and exhaustless soil of her fertile valleys.

DISCUSSION OF MR. WILLIAMSON'S PAPER.

Supt. U. T. CURRAN, of Sandusky, opened the discussion as follows: Before I tried to fill the position of superintendent, I thought I knew a

great deal more about it than I now do. I was in the condition of very many of my fellow teachers who have not tried it, and who think it a very nice, easy kind of place, a certain goal to be attained as a harbor of rest. But two years' experience in the office has swept away these false notions. I have found that there are certain settled general principles which underlie this whole matter of supervision; that there is a science in this as there is in education. It has not been written in books, but it will be worked out in the experience of men who are now living. I think that it will finally be recognized that a superintendent in large cities should be the teacher of the subordinate principals and teachers, who have the care of the schools. He will have to do the thinking part of the work, and look to the teachers to attend to the details under his general supervision. I know of but one place in Ohio where this is attempted. The city of Cleveland is trying to place herself in such a position.

Take a small city of ten or twelve thousand inhabitants. What does the superintendent have to do? He has to think out what the board should do, and see that it is done. He has to provide for the selection of teachers, and to see that they are normally instructed, spending the greater portion of his time in the work. I claim that it is not enough that I lay out the work for my teachers and demand that it be done, but it is my duty to become their normal instructor; to meet them from time to time, and show them not only what to do, but how to do it. It seems to me if we put teachers to work in this way, we may get good schools by every method. The methods in this state are about as varied as the minds of men, and these are about as varied as their countenances. What is needed is to adopt some system as a basis, and then see that teachers work parallel with each other and that they do not run across each other's paths.

The next aim of a superintendent should be to look to the quality of the force he directs, and this is the most difficult thing he has to do. He is compelled to have teachers who have not learned how to teach. If he has charge of the schools of a small town near a large city that has the means of securing teachers of experience, he is compelled to see his teachers who have had a year or two of experience and training under him, pass out of his schools, and he has to begin the work of training anew. My own limited experience teaches me that there should be some provision, as normal schools, to supply this defect, though there seems to be a very poor showing to accomplish it, since many believe that it is contrary to the law of the state to divert school money to the education of teachers. Many members of boards of education can not see far enough ahead to understand how it is that, to educate the children, we must educate the teachers. Until this is done superintendents, especially in small towns, must undertake the work of normal instruction in a practical manner. The great problems in educational science lie beyond the reach of most superintendents because of the necessity of providing each day for the needs of the schools as they arise. That work must be done chiefly by men who have more leisure to do it than we have, and who have broader grounds to look over.

The people demand of all of us that we shall use the force which they have placed in our hands, so as to produce the greatest good, and that we shall not waste their money. We are often tempted to set ourselves right athwart the current of public opinion, to shut our ears to what men outside our profession may say—men who do not know anything of education, except what they have heard and learned in schools. But there is a great deal of hard common sense on almost every question possessed by the American people. A kind of general impression prevails on almost all subjects, and if you will observe carefully you will find it is generally based upon the truth. Many superintendents and teachers could have avoided difficulties and could have averted a great deal of damage to the cause of education in the towns where they have been employed, had they heeded this common sense view taken by the people.

A superintendent should be a man of some policy; he should know how to meet a man on the right side, and not to get on the side upon which the quills stick out. He should always be ready to listen respectfully to a man's opinions, given in a respectful manner. He should be willing to hear all parties and all sides of a question, and then should advance his own individual opinion in such a way as not to make himself offensive.

Again, it is the duty of superintendents to make themselves felt among the people in educational matters. They should be the center of educational ideas in their communities, and should give tone to the community on that subject; and this can be done without much trouble. It is their duty to create public opinion if there be none on this subject. The superintendent must also contribute from his experience from time to time for the benefit of those who are younger in the profession; to patronize well the meetings of teachers for self-improvement; to see that educational intelligence is circulated in the shape of educational magazines and journals among teachers, and must give attention to all those minor details which come in and which may appear to be of no great importance, but which, nevertheless, constitute the bone and sinew of the superintendent.

The question of the relation which should exist between superintendents and their subordinate teachers, is one of extreme delicacy. It is one to which there are two sides, and there always will be, until this science of education is reduced to the condition of pure mathematics. How often have we seen in our experience a young principal forced into a line of action by a superintendent whose will was strong, who saw things clearly in his own light, and who had a sort of enthusiasm, such as characterizes certain people, which tends to force every body to do as we do, to think as we think, to act in the same line in which we act, and who had not enough of breadth of view to see that there is more than one or two ways of doing the same thing. How many young persons have been wrecked as teachers; have been forced out of school, simply because it was impossible for them to take the same length of step that was required to keep in the line with others. This is a matter in which I think superintendents should exercise great caution. I have

seen persons utterly fail to teach school at all, when required to do it in a way dictated to them, who, when left alone to work in their sort of unconscious way, produced the desired results.

Col. D. F. De Wolf: There are teachers who claim absolute liberty and freedom to take their own course in regard to teaching, and there are superintendents, I believe, who claim that teachers should take their modes of instruction entirely and exclusively from the superintendent; who seem to hold that, of the six or seven ways of teaching a subject, there is but one right way and that is the superintendent's. I have seen the self-respect of a teacher entirely broken down by a superintendent's attacking her methods of teaching before her class, and yet to an uninterested person, having in view only the best interests of the pupils, the teacher's method was quite as good as the superintendent's, and, for the teacher, much better. Here is a point which seems to me worthy of the attention of superintendents. On the other hand, there is a disposition on the part of some teachers not to take any dictation from the superintendent, not to look at his methods at all, but to run in the old ruts and teach in the same manner in which they themselves were taught, thus running directly in contact with the methods of superintendents or principals. I think our profession has something to learn perhaps with regard to this matter of supervision on the one hand and subordination on the other, from the professions. In the legal profession, the opinions of judges are countermanded in the higher courts, and yet the self-respect of the judge of the inferior court is not interfered with at all. His decisions are taken up and reversed, but he quietly tries the case over again, feeling that he did what he thought to be right. There are teachers who are not ready to have their decisions and plans reversed in any case, though better methods would result from their reversal by their superiors in authority. It may even sometimes not be best for a superintendent to sustain the teacher in a case of discipline where the teacher's action has been hasty or without judgment. It is better that the parents and the teacher should feel that they can appeal with hope of justice to the superintendent. I believe that a decision of that kind can be given so delicately and with such a regard to the teacher's feelings, and with such regard to authority in the school, that no difficulty at all will arise. On the contrary, I believe the government of the school may be strengthened thereby.

I agree with the speakers who have preceded me in the matter of examinations and promotions. I do not know why, as a superintendent, I should not have some confidence in the judgment of my teachers; why their decision with regard to the promotion of John or Mary may not be just as good as mine, so far as their judgment goes, and much better so far as their knowledge of the individuals are concerned. I never could see how a superintendent could, by looking over the examination papers of say thirty pupils, be able better to decide whether twenty-seven out of the thirty should be promoted to another grade, than the teacher who has known them every school hour for the ten months of the year. I never was able to see through this practice of some super-

intendents, and have never adopted it. I believe it is the teacher's place to give the superintendent information in regard to pupils and lead in their examination. Of course the superintendent should examine classes, but for other purposes than the promotion of pupils, or the testing of the teacher's work. I have made considerable inquiry, and find that pupils are promoted in some schools entirely on the results of an examination once a year, conducted by the superintendent whose judgment is set over against that of the teacher. In other cases the matter is left entirely with the teachers themselves. There is a necessity, as it seems to me, to discuss and examine this subject carefully, that we may arrive at just conclusions and proper actions.

The committee on the nomination of officers for the ensuing year made the following report:

President—E. F. MOULTON, Supt. Schools, Oberlin, O.

Secretary—J. A. JACKSON, Supt. Schools, Springfield, O.

The report was received and adopted.

Hon. H. A. M. HENDERSON, State Superintendent of Public Instruction of Kentucky, then delivered the following address:

RELATIONS OF SCHOOL OFFICERS TO A SYSTEM OF POPULAR EDUCATION.

When I was invited to participate in these exercises, my programme for summer labor had been so far made up that I did not see how I could meet the necessities in the home field of work and go abroad for a single week's foreign service; but when I reflected upon the rather rare courtesy extended your speaker, I determined to make any sacrifice to respond, that you might understand Kentucky is not indifferent to such a compliment as is implied in giving her superintendent a place on your programme and a welcome to an annual reunion of Ohio school officers and teachers. I hope that the present occasion may serve to inaugurate a close bond of sympathy and coöperative effort between the sister states. As the waters of the beautiful river that divides us, kiss either shore and yet mingle in one broad channel of commerce, so the educators of Ohio and Kentucky, while true to the fealty due the field of their labors, may engage in a current and comity of feeling broad and deep enough to float the great common bark of education into that haven where its precious wares will find market at values commensurate to their worth.

NATIONAL EDUCATION.

I am to speak to you of the "*Relations of School Officers to a System of Public Education*", and one of these may be defined, in this connection, to be a hearty catholic sympathy with the cause of universal enlightenment. A mere provincial man is too narrow in his views and feelings to compass the great object the philanthropic educator has sphered on the horizon of his aspiration, namely, the delivery of the race from the weltering wastes and woe of ignorance, and the elevation of every human

mind to that region of splendor in which light and love hold married court as King and Queen. It is true that "Charity begins at home", but it does not end there. It can hardly survive there, unless it sends out its rays through the window and far over the hedge-row of the cottage and the fields beyond. All vital forces work from the center outward. The cell is the initial starting point, but from it proceeds an infinite series of development. The sun does not encircle itself with an opaque ring to confine its splendors to its own immediate sphere. It shoots forth its rays of light and heat millions of miles across the tracks of space, warming myriads of worlds into life and binding them to its own bright bosom. Did it confine its emanations, it would but kindle the fires which would consume itself and reduce to ashes the mighty capital of our universe, and leave all the provinces of its governing throne in the wild anarchy of a primitive chaos.

The school officer, then, properly animate with his mission, is to hold his heart in healthy sympathy with the efforts of all to extend the benefits of popular education, and, if I may be pardoned the remark, to consider, as much as the means of information will afford, what are the best agencies to accomplish this when applied to peculiar conditions of populations. If a distant or contiguous state is endeavoring to work through the mists of ancestral prejudice out into the broad sunlight in which a universe is swimming, let no educational philanthropist suppose that any mere artificial expedient—any mere calcium light that may serve to make luminous the haze—will answer the permanent ends of popular enlightenment. Civilizations of any character are not forced growths. They are the products of a long past. They are, in their higher forms, but the condensation and crystallization of the star-dust that has been floating in the spaces of mind searching for affinities, and, like only joining wedlock with like when twin elements come in contact. To coerce an unwilling people with methods, may serve to crush the germ of a sentiment which, if left to its natural growth, would produce a harvest of blessings.

The idea, I mean to convey, is simply this, that educated minds and the officers that conduct great systems to produce them should seek such comprehensive views of public wants, in different localities, as should lift sentiment out of the bounds of a mere neighborhood apprehension and put it upon the consideration of what is best to be done for a people so differently conditioned from those that come under more immediate observation.

In a country where church and state are united, it may be best to relegate the work of education to the ecclesiastical element. In a republic like ours, it would manifestly subvert the very ends of our constitution were we to turn over to any denomination of Christians the funds derived by public taxation for educational purposes. In an empire like the German, compulsory education may be so closely allied to the general form of government as that it will produce no friction in its operation. In a country and government like our own, it would not perhaps admit of general application, without spreading the leaven of discontent

throughout the republic, fomenting occasions of public discord, if not, indeed, generating bloody riots and possibly a wide-spread revolution. While the general theory of a public-school system must ever be the same in every thoughtful mind that has studied the subject, the theorem may be attended by scholiums and corollaries that give the problem other phazes of demonstration and of application in different localities.

We have a separate problem to work out in Kentucky. With us wealth and population are very unequally distributed. In one section of the state we have a dense population of colored people, and in a large area of country the African is almost without representation. We have only forty revenue-paying counties, and seventy-six that receive more school money than they pay. We have whole counties of people thoroughly *en rapport* with our system, and others in which there is a large and powerful hostile element. Our counties are not laid off into townships, making it exceedingly difficult to district the state properly and thereby secure the erection of good schoolhouses. Massachusetts has a population about equally distributed as to wealth and numbers. To solve the problem, therefore, for one township, is to solve it for the state. In Kentucky we are so conditioned that we have many things to consider and many antagonisms to meet. We are closely studying our wants, rapidly approaching the organization of a system that will answer the ends of our population, white and black; and nothing but disaster could attend any scheme which proposes to embrace us in a uniformity projected by those totally ignorant or indifferent of the difficulties and doubts with which we are fighting.

It will be easily perceived, therefore, that I am opposed to any national scheme of popular education, or the creation of any United States Bureau or Commissioner who shall be invested with any *authority* over the superintendents of the separate states. Each state can best work out this element of civilization for itself. I am not opposed to Congress making donations of the public treasures and lands, upon an equitable basis, to such institutions as the Smithsonian, or to aid the states in the further endowment of their public schools. I think all this is far better than bonuses to monopolies of any character, or to corporate institutions that can, through the channel of self-interest, successfully engineer their way to popular favor. I am not opposed to a Commissioner of Education to be located at Washington, as is General Eaton at present, whose relations to the subject of popular education shall be that of a general statistician. The Annual Report he sends out is worth the cost of the bureau. It has always afforded me pleasure to coöperate with him in his quest for information, and I have received valuable aid through the agency of his office. The relationship of the U. S. Commissioner of Education to a system of public education should not, I think, be extended beyond the powers now conferred upon him.

STATE SUPERINTENDENCY.

You must allow me to assume that the Superintendent of Public Instruction of each state is the normal head of a school system possible to

this country. He should be selected for his qualifications. In most of the states he will be the organizing force of the system. If he is not enthusiastic, industrious, tactical, intelligent, free of speech and pen, but little advance can be expected. The average legislator will be ignorant of the existing laws, imperfectly informed upon the subject of educational reform, and be biased by the prejudices, passions, or geographical views of a local constituency. He will ordinarily have neither time nor inclination to study the history and theories of education, comparative school-laws, or the topographical distribution of the territory to be provided for by judicious legislation. My observation is, that there is no subject that lawyers and law-makers have studied so little as school jurisprudence. The lawyer has so little profitable litigation connected with the administration of a school system, that his attention is not apt to be directed toward this subject as toward the other branches of his profession. Men engaged in other pursuits, except here and there an exceptional case, regard the whole subject as of too much magnitude to successfully enlist their endeavors. The study of a school system is a special subject and of sufficient importance and comprehension to engage the most mature and exhaustive reflection of a mind competent to wrestle with so complex a problem. The superintendent's time and attention should be wholly devoted to his official duties. He should gather to the shelves of his library the best books upon school organization and architecture; he should carefully peruse the suggestions of those who have preceded him in office, or who are contemporary with him in other states; he should acquaint himself with the laws of other commonwealths, and be prepared to present, in eclectic form, the best suggestions in them all for the consideration of those entrusted with the framing of a code for his own; he should scrutinize the reports and recommendations of all the subalterns of his department, and be prepared to sit in calm and wise judgment upon conflicting views, and to harmonize a variety of diverse opinions; he should inspect, personally, the field which he supervises, and converse freely with school officers, parents, and pupils whenever an opportunity offers; he should be as free as possible from all partizan bias, regarding himself as the servant of all the people, and holding the scales of justice with an even hand; he should arm himself with arguments for the public ear, with a view of toning up sentiment, and with special pleas with which to overcome the objections of legislative committees; he should be able to answer all communications with an intelligent dignity; he should be skillful and discriminating in the drafting of his reports; he should be possessed of an abounding patience, that he may preserve the equipoise of his temper when his most cherished measures are antagonized; he must be content to work and wait for results, and have faith to believe, though for the time defeated, that which deserves to succeed will, one day, triumph, and, to this end, be willing to lay foundations, though others should enter upon the scene of his labors, and uprear the superstructure whose design he drew upon his trestle-board. Above all, he must have an honest heart in his work. If he undertakes the office merely for its pay, he will be most likely satisfied when he exhibits ability enough to

draw his salary. If he counts the thought and toil, incident to an enthusiastic employment of his position, as worthy the enlistment of the best endowments of the human mind and energy, *then* his labors will not discourage him; nor will his failures cast his aspirations to the ground; nor will the pain of opposition paralyze his endeavors; nor will difficulties intimidate him to dare to attempt the good that courage might win. No man with a timid theory or a faltering purpose is expected, by the public, to lay his hand upon the axle of any great movement. No party could hazard the experiment of ratifying the candidacy of an enemy of common schools for the office of State Superintendent. He is, at least, expected to be in earnest, and to give no sham advocacy to a system that proposes the education of the masses. If there is a being who deserves and as certainly will receive the contempt of the people, as that an avenging Nemesis waits upon the hypocrisies of men, it is that individual who, for mere official position or pelf, is satisfied to be thrust into place, under the disguise of friendliness to education, afterward to betray with the traitor's kiss for bribe, or by theft, or by indolence, the great cause intrusted to his keeping. If indignant Heaven does not smite such a man with its hottest thunderbolts, he may, at least, expect to be scourged by the knout of an insulted public opinion. It matters not whether it be the head of the system or any of his subaltern officials, the people, whose trust he has received, demand of him earnestness in his work. Nobody has a right to the office of state or county or city superintendent, or district trustee or teacher who is not fired with a peculiar zeal to advance the cause of popular education. The school officer of whatever station must magnify his work. If he thinks meanly of any office to which he consents to be called, and, therefore, undervalues the dignity and responsibility of his post, he will soon degrade his work. If in the humblest places of this noble service as a workman on the temple of human culture, he exalt his office by diligent, faithful, self-respectful service, he will pass, by the verdict of an approving public, to stand jeweled among the noblemen of this realm of mind. But even though the public may, for the time, seem unappreciative of his toils and sacrifices, those he has best served appear froward and fretful because results have not met an extravagant expectation, and unreasoning criticism may be unjust and hard, careless of his burdens, thankless for his pains, he is not to be unduly mindful, but remember, while the smile or encouraging word of those for whom he has struggled and suffered would gladden his worn and weary heart and make the wasting service the sweeter, that it is not for this alone he is harnessed in this battle. He is soldier in a strife whose awards are richest in a consciousness of motives well meant and duties nobly performed. There is a sunnier smile which is always showering its beams upon him—a good word speaking in tones of benediction to an ear within the soul.

The state should provide the means and appliances for making the superintendent free in the field of his toil. The salary should be sufficient to protect the incumbent from all that financial uneasiness so fatal to mental work, and to allow him to respond to the various local calls that are made upon skilled talent for its best service. Merely routine

labor is easily performed, and can be cheaply procured. The extra and more important work which cultured energy and enterprise, when properly encouraged, can put forth, quadruples this mere automatic performance of office duties. It was the sage remark of my predecessor in office, that, "in the expenditure of large means and agencies to great ends in any cause or enterprise, the worst and unwisest economy is that kind of parsimony which denies a sufficiency of means and agencies to utilize and apply the materials and forces on hand to the best advantage, and suffers them to be used to inadequate purpose, or wasted in percentage."

If the superintendent is expected to encourage the faint-hearted in his jurisdiction by strong and courageous communications addressed in response to their expressed misgivings or their fears; if he is required to assist the county examiners in preparing proper questions for the examination of candidates for teacher's certificates; if it is demanded by laws that he shall give judicial decisions upon questions of appeal from county superintendents, that shall rank with the deliverances of supreme court judges; if he be called upon to travel to distant shires to organize, conduct, or aid the teachers' institutes, and by public advocacy to help forward enterprises of great local interest; if he is to organize reports that shall grade with the best state papers of the chief executive; if he is to be summoned to the drafting of school laws crystallizing the dearest interests of the commonwealth; if he is to be summoned, night after night, before legislative committees to expound his views and emphasize his plans with reference to every educational scheme presented for the favor of legislatures—if this, in addition to the answering of thousands of letters on as many subjects, and the supervising of a large counting-room and statistical business, and general oversight of a system compelling large administrative ability;—then the state economizes nothing for itself by a narrow policy in providing the means by which this comprehensive and complex work may be best accomplished. The relation of the State Superintendent to a school system is of the highest importance, and he should be retired as much as practicable from those mere mechanical duties which can best be relegated to a good bookkeeper and a corresponding clerk.

COUNTY SUPERINTENDENCY.

The office of county superintendent (or commissioner) is scarcely exceeded in importance by that of state superintendent. The field is smaller, but it is worked more in detail. The duty of organizing and directing the operations of from forty to one hundred schools is one that may well lay the burden of responsibility upon the heart of any upon whom it is imposed.

What should be his qualifications? He should be a man of good character and education, possessed of dignity and firmness mingled with suavity of manner, and be industrious beyond degree. His principal duties are comprised in the exposition of the school laws, the examination of teachers for certificates, the advising of district trustees, the conducting of institutes, disbursing funds and auditing accounts, visiting

and lecturing the schools, adjusting differences and settling difficulties, reporting statistics, and by speech, private and public, endeavoring to inspirit the people with educational enterprise, to stimulate his subalterns with an ardent zeal, and to convince the parents that their highest interest is wrapped up in the education of their children. In addition to all this he should be a man of architectural taste, diligent in the study of the laws of hygiene as applied to the construction of schoolhouses, and, in consequence, looking well to the bettering of the places where the business of education is carried on. It is as disgusting as the blasphemy of administering baptism to a dog, to put at the head of a county's school interest, as an example to the children, a man of profane speech, dissolute habits, and rudeness of manner. It is a mockery to place in the position one bankrupt of faith in the public-school system, hardly excelled by the folly which would trust a discharged felon as cashier of a bank. If the relation of these two things to the *moralé* of a system of popular education are not regarded, nought can be looked for as the product of his example and influence, but the corruption of the pupils, the distrust of the good, and the spreading of the leaven of discontent and mutiny among the people.

Provision should be made either by the state or the respective counties (I prefer the latter) to furnish a salary adequate for procuring the services of a thoroughly competent man who will study the nature of and who will do the work. At least one inspection visit should be made to each school while it is in session. He should employ at least a day in the examination of the pupils in each school as to their proficiency in their several studies, and register the judgment he makes in a book provided for the purpose. During his visit to the district, by prudential and discriminating inquiry and personal observation, close and critical, but not pragmatical, he should acquaint himself with all matters touching the state and operations of the school, the efficiency of its trustees and teachers, recording results, and transmitting an abstract of the same to the state superintendent for his information as to the general wants, progress and possibilities of the system. The mechanical arrangement of the schoolhouse, particularly the arrangements for warming, lighting, and ventilating the room or rooms, and the kind of desks and seats provided for the children, should be the subject of observation and counsel. In his contact and counsel with teachers and trustees, he should be affable in deportment, advising them in private, but not in a magisterial manner or a captious spirit, and certainly never in the hearing of the pupils.

The duties that relate to a well-ordered county superintendency require an educated and skillful and judicious officer. A lawyer, merchant, or mechanic may perform the mere mechanical service of distributing blanks, receiving reports, tabulating statistics, and disbursing money. This simply is the framework of the system. If we would impart muscle, nerve-power, vascularity, in a word, *life*, we must have unstained character, talent, prudence, taste, public spirit, faith, and skill combined and utilized in a county commissioner.

The salary of the county superintendent should be fixed, graduated in amount according to the responsibilities that attach to the office, and certain qualifications be prescribed and enforced, as a condition of eligibility to office. To perform the duties of superintendent efficiently, demands as much time, labor, talent, and responsibility, as to discharge the duties of any other county office. But it is useless to expect to obtain the kind of ability and service required until the pay is something like commensurate with the character of the talent and toil involved in a faithful incumbency of the office.

CITY SUPERINTENDENCY.

I have a single remark to make with regard to city superintendency. There should be a principal of each school. He should be a superintendent of the various grades. He should teach, but in no grade or class. He should go from room to room, establishing a uniform discipline, and assisting the teachers in their work. It is his to inspire an *esprit du corps* that shall animate all, both teachers and pupils, from the lowest to the highest grade. He must assist, by faithful instruction in the arts of teaching, privately, each of the teachers that is less expert than the standard requires. He should see that the building is properly warmed and ventilated, and that all the means and appliances of instruction and comfort are provided and preserved. He should work in harmony with the city superintendent. The duties of a city superintendent more nearly resemble those of the state, and his relations to a metropolitan system require in him all the qualifications requisite for a state superintendent, and a practical turn for business besides. The demand for men of superior ability to fill such positions is increasing. And if it be proper for telegraph, railroad, insurance, and manufacturing companies to pay high salaries to secure successful management, and if a builder will pay an architect five per cent on the cost of the structure in order to have his edifice constructed in accordance with plans and specifications, it would seem to be justified, by analogy, that a sufficient sum of the resources of a city school system be expended in procuring the skilled expert to superintend the vast and complicate interests involved in the efficient conduct of a municipal school system.

DISTRICT TRUSTEE.

It remains for me to speak of the School Trustee. He should be the best man in the district that can be selected for the position. He should be intelligent, public-spirited, in sympathy with the system, and morally upright. He should take the office because it affords him a field of doing good. He should look to the conveniences of the schoolhouse, visit the school often, be prompt in making his reports, and by all the agencies he can command incite his neighbors to a lively interest in the education of their children.

STATE ASSOCIATION.

Finally, the relations of school officers to a system of popular education are such that they should all be combined in one general state asso-

ciation. By this means acquaintanceship is formed and views exchanged, better methods are discovered or developed, the school sentiment is organized and prepared to give a strong emphasis to its utterances when it lifts up its pleading voice in the halls of legislation. We need a comprehensive scheme of popular instruction, and all our school officers, from district trustee to U. S. Commissioner, put in full sympathy with it. The county trustee has hardly apprehended his relations when he exhausts his entire sympathy upon the district school which he supervises. The U. S. Commissioner must look away from his official summit until his vision shall penetrate the vale or mountain nook where is secluded the most obscure schoolhouse. *All* should look along the entire line of a comprehensive system of public education, and push the propagation of school ideas, until the public mind shall compass them in its favoring embrace. I would see every town add to its elementary school the grammar school. I would see in every shire town the high school, and in every state a well-equipped university. I would have the Congress of the United States crown the system with a grand national university. I would have the whole free as the sunlight and air, to every child, as in the stages of his advancement he was prepared to enter each. The Government should be the great corporate benefactor of the people. The best way to express the worth of our grand territorial domain, is in the improved culture of American citizenship. Let the money that can be spared from the sales of public land, go to enrich mind, to invigorate with private virtue the hearts of the people, to ennoble and exalt patriotism, rather than in subsidies to avaricious corporations and soulless monopolies. Thus shall prosperity attend us as a nation, the smiles of an approving God light the path of our progress, our "sons be as plants grown up in their youth, and our daughters as corner-stones polished after the similitude of a palace."

At the conclusion of Mr. Henderson's address, the President extended an invitation to visitors from other states to address the Association.

Hon. H. D. McCARTY, State Superintendent of Public Instruction of Kansas, being called upon, responded as follows:

As the representative of a young state in the West, it gives me pleasure to be able to say that we are trying to educate our youth. But a few years ago, Kansas was a territory, and perhaps in the estimation of a portion of the people of the United States, it is not now much better than a territory. Yet in the last four years our school population has doubled itself. We have over two hundred thousand children of school age now in the state of Kansas. But I wish to tell you something about our system of public instruction. We do not claim to be original in Kansas. It was not our ambition to originate something new there. We looked and saw what Ohio was doing, what Massachusetts was doing, and what many of the other older states were doing, and we thought that if we could do something nearly like what these older states were doing, we should do very well. So when the organization of our system

of schools was undertaken, the committee of education secured the laws of the states of Ohio, Connecticut, Massachusetts, and all the other states, and they selected a portion from this state law and another portion from that, endeavoring to select the perfections of all, and then bring these together as well as they possibly could, and thus organize a good system of schools. Those of you who have read the Kansas school law, have noticed this fact, that there is very little unity in the system. But it is good enough for our present needs in Kansas. Under that law we are trying to educate the children of the state. Under that law we have built more good school houses, in proportion to our population, than any state in this Union. Under that law we have a better system of education throughout the rural districts than is found in any other state in this Union. We do not pretend to say we have a better system of schools for towns and cities than you have in Ohio, but we do pretend to say that we have a better feeling for educational matters all through the state of Kansas among the mass of the people than exists elsewhere. We are a young state yet, but we are trying to follow fast in the footsteps of our sister states, and we shall never be satisfied until we are side by side, fully abreast, even a little ahead of any other state in the Union. [Applause.]

The President then called out School Commissioner Harvey, of Ohio, who thus responded:

I do not know why Ohio should say anything. We have invited our friends from other states to come here, and we wish to hear from them. They will hear from us in the regular exercises of our Association. I have to say, however, that I welcome most heartily those from other states who have visited us. I am glad that they have come here. I am glad to know, too, that most of them went out from Ohio. [Laughter.] Our friend from Kentucky [Mr. Henderson] has Ohio ideas, and can be called a half Buckeye. I have learned many things from him in private conversation relating to his work in Kentucky—a work which is telling upon the educational interests of that state. We give him a hearty God-speed in that work. And for one I am glad that he has come here to tell us what a school official should be and should do. I am glad that he has come to tell us our defects, to warn us of quicksands, of reefs, of the dangers that may beset us in the future, because, though all may not know it, I felt all the time he was speaking, that there was a warning voice heard in this hall. Our friend from Kansas is a Buckeye. He was once an Ohio teacher, and went out from us. We are glad that the educators of Kansas feel as they do. I hope they will have a better school system than we have now in Ohio. But I say to them in Kansas, as I say to our friends in Kentucky, that they must work hard if they expect us to fall behind. We do not mean to stand still much longer. There are times in the march of armies when they must make a stand and entrench. So in the progress of educational interests there are times when we must stand still, and defend ourselves against assault. We have such a time as that now in Ohio. But we are not resting. We

are simply preparing for the battle, and when it comes, the victory will not be uncertain.

I hope the other states will strive to excel, and we will help them if they need our help. Standing as Ohio does in almost the centre of this great Republic, her educators are ready to say to those of other states teach us, give us the benefit of your experience, and our school system will be made the better by it.

It was announced that Prof. Fish, of Little Rock, Arkansas, was present, and he was invited to address the Association. He responded in substance as follows:

The Buckeye State is well represented in Arkansas; for we have Buckeye text-books there, and Buckeye teachers, and we recently had a Buckeye system of schools. But, if the truth must be told, we have now no system at all. Our legislature last year undertook to make our school law like an old shoe with the sole cut loose from the upper. The sole consists of a system of schools in the cities and towns. If the people in the cities and towns want a free-school system and elect a board of directors, that board can tax just as much as it thinks is sufficient to carry on the schools for nine or ten months. We are working under this system in Little Rock, and think we have accomplished something. When I went there four years ago we had eleven teachers; we closed last year with twenty-seven teachers. We expect to open next year with thirty-three. The new law gave us the county superintendency in lieu of the circuit superintendency, but the salary is fixed at three hundred dollars a year, payable in county scrip, now worth about twenty cents on the dollar. The legislature was careful to place a provision in the school law, that when a school tax is levied in the counties there is no provision for its disbursement, and so they had no school last year in the country districts, and may have none this year. There is usually a little good coming out of every evil. You all know we have had a little conflict in our state in consequence of the fact that two men wanted to be governor. Some one has said that he did not know why, for the state was not worth stealing. [Laughter.] One of the very first acts of the former legislature was to release the school fund in the treasury, so that the teachers could be paid, after having waited for a year and a half for their pay, aad they then received scrip worth only twenty-five cents on the dollar. The city teachers were not included in this, but the country teachers were—those who work the hardest and get the least pay. But I came to Ohio to meet you here, and not to tell you my experience in Arkansas.

Mr. Sheridan Cox, of Kokomo, Ind., was called out, and responded as follows:

I have been in the state of Indiana nine years—was formerly in Ohio. [Laughter.] I have met a good many times with the teachers of Ohio. I first met the Association at Steubenville, and the last time at Toledo. I believe Indiana is marching along with the rest of you. Of

the many things of which she boasts is a large school fund, although it does not produce more than that of some other states. The last legislature amended the school law, improving it, I think, in many respects. A new feature introduced is the county superintendency, and I think the schools will be very much improved by it. As a general thing good, earnest men have been elected to the office, and they are doing good work, and I think we shall be able to sustain the system. I am glad to meet with you, and to see so many old friends here.

Mr. J. H. Thompson, superintendent of schools, Des Moines, Iowa, formerly an Ohio teacher, was also called out, but declined to make a speech.

The Association adjourned.

EDITORIAL DEPARTMENT.

——We have enlarged this number to admit the proceedings of the Ohio Superintendents' Association at its late meeting. The papers are given entire, and the discussions are carefully condensed from full phonographic reports. Next month we shall publish the proceedings of the Ohio Teachers' Association in full, making the number about double the usual size. These two numbers (August and September) will be of special value to all persons interested in public education. To any thoughtful teacher they will be worth the subscription price of this journal for one year.

——The late meetings of the State Associations at Put-in Bay were largely attended, and the general verdict is, that the exercises were unusually interesting and profitable. The attendance was estimated at about eight hundred. The programmes were badly disarranged by the unavoidable absence of President McMillan and Mr. Barr, of the Superintendents' Association, and the absence of Hon. O. Hosford, of Michigan, who was announced to read a paper before the Teachers' Association, and the late arrival of Hon. B. F. Hopkins, of Indiana, and Prof. Walter Smith, of Boston. But the executive committees were equal to the emergency. The time of the Superintendents' Association was well filled, and there was no lack of papers and addresses in the Teachers' Association. An admirable paper was happily found in Miss Lathrop's "other trunk", and several college men had capital speeches in mind, if not in the "other pocket." President De Wolf presided in a very acceptable manner, and his able, sound, and sensible inaugural was a felicitous introduction to the exercises which followed. The annual address by President Fairchild, of Oberlin, on "The Personal Power of the Teacher", was one of the finest delivered before the Association in years. It was rich in thought, replete with wisdom, and elegant in dic-

tion. The two addresses of Hon. H. A. M. Henderson, of Kentucky, were well received. His views on the relation of the National Government to education in the states, agree with those which we have long advocated. Kentucky has evidently a live educator at the head of its school system, one who understands its needs and has the pluck and energy to meet them. The paper of Hon. M. B. Hopkins, of Indiana, was a clear and able exposition of the school system of that state, and especially of the system of county supervision, organized one year since. Prof. Smith filled the closing hour of the session with good sense and humor, on the subject of Art Education. His address was very happy, delighting all who heard it. The papers for discussion, read by Messrs. Williamson, Watkins, and Hancock, were brief, pointed, and strong. Mr. Barr's excellent paper was not read, but it will be perused with interest by many of our readers. We have only space to add that the meeting was socially a great success. It was preëminently an occasion of good feeling.

—— We had the pleasure of attending the second annual commencement of the Ohio Central Normal School, June 18th, 1874. The exercises were held in the beautiful grove in front of the Normal building, in the presence of a large and interested audience. The graduating class included nine young ladies and eight young gentlemen, several of whom have had considerable experience in teaching. Their essays and orations showed maturity of judgment, thorough training, and a very promising professional spirit. The brief addresses to the class by the associate principals, Messrs. Lewis and Ogden, were admirable in spirit and counsel. They evidently do not believe in puffing up their graduates with the notion that they have mastered the science of teaching and have nothing more to learn. We take a special interest in this institution because we believe it aims at the true idea of a normal school, and we rejoice in its increasing prosperity, so richly merited. We can heartily commend it to all young persons in Ohio who may wish to make preparation for teaching. The location is beautiful and the accommodations excellent.

—— The Northwestern Normal School, in charge of Mr. J. Fraise Richard, has been removed from Republic to Fostoria, where suitable buildings have been provided, and needed pecuniary and moral support promised. The Inland Normal School in Summit county has been merged in the Northwestern Normal School, and Mr. G. F. Buket is to be one of the teachers. The fall term will open on Tuesday, Sept. 8th. The citizens of Republic have formed a joint stock company, elected trustees, and organized a new institution, under the title of the "Republic Normal School." Mr. B. B. Hall, formerly in charge of the schools of Medina, has been elected principal and his salary guarantied. Mr. Hall writes us that it is his intention to do thorough and earnest work, and that he hopes in time to make the institution in reality, as well as in name, a true normal school. We hope that his modest anticipations may be more than realized. The first term will open Sept. 1st.

—— Supt. W. E. Crosby, of Davenport, Iowa, declined a reëlection at the close of his fourth year, to devote his time to "*The Common School*", and Miss Phœbe W. Ludlow, principal of the Davenport Training School, was unanimously elected his successor. Miss Ludlow has a high reputation as a teacher.——Prof. A. T. Nightingale, late superintendent of the public schools of Omaha, Neb., has accepted the principalship of the Lake View High School, Ill. Nebraska has thus lost one of its most earnest and successful educators.——Mr. A. C. Shortridge, for many years the efficient superintendent of the public schools of Indianapolis, has accepted the presidency of Pardue University. Mr. Geo. P. Brown, for several years past in charge of the Indianapolis High School, succeeds Mr. Shortridge as superintendent.——Dr. J. W Hoyt, of Wisconsin, U. S. Commissioner to the late Vienna Exposition, and President of the Jury for Education, has been honored with a Knighthood of the highest order, bestowed by the Emperor of Austria.——Prof. Benj. W. Putnam, of Jamaica Plain, passed the late examination in the Boston Normal Art School, and now holds the diploma of that institution.

—— Mr. J. B. Peaslee, for several years past principal of the Second Intermediate School, Cincinnati, has been elected superintendent, *vice* Mr. John Hancock, one of the most efficient and successful superintendents in the United States. The filling of his place will be a remarkable success, and Mr. Peaslee has our best wishes for its achievement. Mr. Hancock has been elected superintendent of the public schools of Dayton, at a salary of $3,000.——Supt. Findley, of Akron, has been reëlected for two years, at his present salary, $2,500—a wise recognition of efficient service and marked success.——Prof. Daniel Worley has been reëlected superintendent of the public schools of Canton for the full term of three years. This is a handsome and well-deserved compliment—a fitting close to one of the most prosperous and successful years in the history of the Canton schools.

—— Dr. Eli T. Tappan has resigned the presidency of Kenyon College, but his resignation had not been accepted when we last inquired. If relieved from the presidency, Dr. Tappan will resume the chair of mathematics, and renew his favorite study.——Baldwin University has conferred the degree of LL.D. on Prof. A. Schuyler, and Wooster University has honored Supt. De Wolf, of Toledo, with the degree of Ph. D. We lift our hat to the doctors.——The faculty of Oberlin College recently suspended three members of the Junior class for social drinking and smoking, practices forbidden by the regulations of the institution. This action is heartily approved by the class, as well as by the friends of the institution generally.——Hiram College lets its light shine in our advertising pages this month. It richly deserves the prosperity it has attained and the larger prosperity it seeks.

—— Messrs. Belfield & Kirk, two live principals in the Chicago schools, have bought *The Chicago Teacher* of Mr. Jeremiah Mahoney. Their first number (July) is excellent.

—— Mr. A. R. Sabin, for many years one of the ablest and most successful principals in Chicago, more recently a teacher in the Chicago High School, has accepted the charge of Lake Forest Academy, a well-established boarding school for boys, located in the beautiful town of Lake Forest, a few miles north of Chicago. We learn from the *Chicago Teacher* that he is to receive a salary of $2,500, with provision equivalent to $2,000 more—a handsome increase of income. Mr. Sabin is an excellent scholar, a superior teacher and disciplinarian, and every inch a true gentleman. The increasing success of Lake Forest Academy is assured by his acceptance of its direction.

—— The National Educational Association will meet in Detroit, Aug. 4th, 5th, and 6th; the West Virginia Teachers' Association at Clarksburg, Aug. 4th–7th; the Kentucky Teachers' Association, at Owensboro, Aug. 11th, 12th, and 13th; the Pennsylvania Teachers' Association, at Shippensburg, Aug. 11th, 12th, and 13th; the Minnesota Teachers' Association, at Owatanna, Aug. 18th, 19th, and 20th; and the Iowa Teachers' Association, at Des Moines, Sept. 1st, 2d, and 3d. The American Institute of Instruction met in North Adams, Mass., the 28th, 29th, and 30th days of July.

—— We are requested to state that schools or individuals wishing to contribute to the "Teachers' and Pupils' Fund" for the Agassiz Memorial, can do so at rny time. Schools which were closed before the 28th of May, will thus have an opportunity to make their contributions in the fall. Remittances may be sent to Jas. M. Barnard, Esq., Treasurer, 13 Exchangs St., Boston, Mass.

—— We call special attention to our advertising pages this month, largely filled with new advertisements. The best text-books published in this country are there represented; also, school supplies, educational institutions, etc. Teachers will be specially interested in the advertisement of Eldredge & Brother.

NEW BOOKS RECEIVED.

Exercises in Greek Syntax. With References to the Grammars of Crosby, Curtius, Goodwin, Hadley, Koch, and Kühner. By James R. Boise, Ph.D. Chicago: S. C. Griggs & Co. 1874.

Elementary Greek Grammar. By William W. Goodwin, Ph.D. Revised Edition. Boston: Ginn Brothers.

Peck's Complete Arithmetic. By William G. Peck, LL.D. New York and Chicago: A. S. Barnes & Co. Price 90 cts.

SCHOOL REPORTS.

Annual Report of the Board of Education of Connecticut. 1873–4. Dr. B. G. Northrop, Secretary.

Annual Report of the Public Schools of New Bedford, Mass. 1873. H. F. Harrington, Supt.

Annual Report of the Public Schools of Richmond, Va. 1873. J. H. Binford, Supt.

Annual Report of the Public Schools of St. Louis, Mo. 1872–3 W. T. Harris, Supt.

SITUATION WANTED.—A lady who has had considerable experience in graded schools, desires a position as assistant in a High School or Grammar School. Reliable references given. Address, M. L.,
Care of OHIO EDUCATIONAL MONTHLY, Columbus, O.

SITUATION.—A young man who is an experienced and successful teacher, a thorough scholar, and well qualified in every particular, desires a situation as superintendent of a graded school or principal of a high school. For further information, address Prof. S. J. KIRKWOOD, Wooster, Ohio.

—**J. C. RIDGE,** Cincinnati, O., can be engaged to do Institute work in his specialty of Elocution and Primary Reading, at any time during the year. Refers to John Hancock, Cincinnati, O., Thos. W. Harvey, State School Commissioner, and E. E. White, Columbus, O.

—**A. E. GLADDING,** Hudson, Ohio, will make engagements to teach Free-hand Drawing and Map Drawing in Teachers' Institutes.

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THE

NATIONAL TEACHER:

A MONTHLY EDUCATIONAL JOURNAL.

Vol. IV. SEPTEMBER, 1874. No. 9.

OHIO TEACHERS' ASSOCIATION.

PROCEEDINGS OF TWENTY-SIXTH ANNUAL MEETING, HELD AT PUT-IN BAY, JULY 1ST AND 2D, 1874.

The Association was called to order at 9¾ o'clock, Wednesday, July 1st, by G. A. Carnahan, of Cincinnati, chairman of the Executive Committee.

Prayer was offered by Rev. Dr. A. A. E. Taylor, President of Wooster University.

L. L. Campbell, of Niles, was chosen assistant recording secretary; G. T. McCalmont, of Madison, assistant treasurer, and E. F. Moulton, of Oberlin, assistant corresponding secretary.

Col. D. F. DE WOLF, President of the Association, then delivered the following—

INAUGURAL ADDRESS.

FELLOW TEACHERS:—We have fairly finished a quarter of a century since a few men, full of enthusiasm and of hope, organized this Association to assist in meeting a great demand of the age. Some of these were then young men, with flattering promise of reaching the first positions in more lucrative, and then more popular professions. The deep sigh of the people for more light they recognized as the voice of God calling them to do personal sacrifice for their country and their kind. The enthusiasm which stirred within them, they felt as the consummation in themselves of His mission who came to fill the children of men with His own spirit of devotion to the highest good of men. Recognizing obedience to these heavenly impulses as the sublimest element of moral character, we this day yield a grateful tribute to the memory of these

worthy men, and I trust still cherish the spirit with which their noble presence and works have inspired us. Some of these are yet in our field of labor, devoted workers still. Some have followed the call of duty to other fields, but have not forgotten us or our work. Some have ascended to the higher life, but only in such manner as to realize to us the fact that a soul once truly living is immortal even here, that out of its work and out of the souls which it has warmed with its life it can never die. The genial glow of interest in all that pertained to the efficiency of our work, the honor of our state, and the general good of man through education, will never cease to cheer the heart of every one who has grasped the hand of Lorin Andrews, and looked into his soulful eye. The unflagging earnestness, arising from a depth of conviction which but few can even appreciate, will come again with every remembrance of the worker, Edwards, as a guerdon to a sincerity and tensity of purpose that will never fail to do us good. If we would reassure ourselves of all the rich and sweet rewards of purity and truth and earnest love for men, we have but to recall our brief companionship with Horace Mann. Each thorough man who has left us, has left his character and the accumulated influence of his work as an inheritance to us all. Not alone the Pilgrim Fathers and the patriots of the Revolution are entitled to our homage. Heroes in zeal and work have pressed their warm hearts to ours, in as noble and worthy a cause as the initiation and achievement of revolutions.

As words are but the capable receptacles of thought, which the genius of eloquence may swell into great round worlds of meaning and of sentiment, so the mere organization or form of government and society is but the capable receptacle of the grandeur of life and manly enjoyment which the earnest, working thousands may infuse into every interest of that society. It is the present soul and achievement of our civilization, and not its past history, that give it value to the world and to ourselves. Whoever has added to the facilities for human improvement, either by perfecting the instruments of education, or by adapting these means to the elevation of classes hitherto but imperfectly reached, is as thoroughly entitled to our remembrance, in proportion to the measure of his spirit and capacity, as a Paul or a Luther, a Sidney or a Washington. It is of the greatest advantage that we rightly estimate the importance of our work. We can not, indeed, too often recall to our minds its relations among the forces of society, nor can we by any possibility overestimate its relative value. In deep and essential importance to the nation as its life and defense, in dignity and sacredness as a means of human happiness, human enlargement, and human elevation here, as well as of eternal beatitude hereafter, it will not suffer in comparison with any other work.

If in this quarter of a century our profession has well accomplished the work laid out for it by Providence and enlightened philanthropy, the generations will call us also blessed, and we may rejoice for the past successes as we gird our loins for hopeful work on the morrow.

But in our professional rejoicings, let us not forget those names upon our charter, nor yet the names of others of their class, whose possessors

were only of us by that sympathy and brotherhood which are essential elements of manly character. While engaged in other labors, they lent a hand with us, because Christianity had leavened them likewise with its spirit of benefaction. Among these we shall always remember the pleasant, comely face of Samuel Lewis, the lover of every race and class of men; the promoter of every good cause; also the glowing eloquence of Galloway in our behoof, and yet again the wise and helpful counsel of that accomplished educator and unrivaled organizer of grand benevolent enterprises, Mrs. Judge Worcester. These, like others we might name, have gone to their graves laden with the fruits of well spent years, and with the love of all who knew them. Their good example, their wisdom, and their work are left for our enjoyment and guidance. To Him, also, who has arranged the present wonderful facilities for progress, and given us the hopeful task to work in it with Him, we lift our hearts in gratitude, as again we come to acquire fresh wisdom for our work. And that the sheen of this silver festal day may deepen into a still richer sky, until another quarter of a century shall bring the Association to its golden anniversary, abounding in fruits of well-directed labors, ripe in wisdom, rich in social memories, full of still brighter hopes of a still more beneficent future, may God grant out of his yearning love for man, and for His own glory.

It may be almost said that the one thing given to the world through the labors of educators during the last twenty-five years, is, for our cities and larger towns, a system of graded schools. That this graded system is a very great advance from the old ungraded public school, and the old system of private schools and tutorship, all seem, at least in a general way, to claim or to acknowledge. The advantages consist in classes sufficiently large to interest the teacher and put him at his best efforts; in the opportunity thus afforded at comparatively small cost for a thorough discussion of every subject of interest connected with each lesson, in order, first, to a clearer comprehension of the subject; and, secondly, to a freer expression of views by pupils, and thus the securing of the faculty of expression and the other advantages resulting from the habit of thinking and speaking before a number of critical auditors, and under the kindly guidance of a teacher. The graduations from class to class, and finally from the school, also present occasions for all the incentives commonly needed to secure intellectual activity on the part of pupils. These and like advantages can not be too highly estimated, nor can too much thought and pains be bestowed on the best means of satisfying the people of the importance of preserving them. Insidious influences are constantly at work to render people disaffected with the public schools. Selfish and short-sighted capitalists desire to curtail taxes; sectarianism pushes its zealous horns into the system to divide the funds; the blindness of national and race prejudices and pretensions makes demands which complicate the system of instruction without corresponding valuable results however.

Wisdom is certain in the end to be justified of her children. And a wise administration of a wisely constituted system of means for the

achievement of the most valuable of all ends, can but meet the approbation and support of right-minded Americans.

Objections urged against the system as now conducted, are: 1st. The religious or sectarian bias given to them by the daily reading of the Scriptures, and other acts of worship. 2d. The *un*religious, if not the *ir*religious tendency of the schools, by the absence of direct religious instruction. 3d. The cost of the high school, which it is claimed embraces instruction in branches beyond the direct and essential requirements of a populace which seeks only those elements of education necessary to obtain a livelihood, or to perform the duties of citizenship. 4th. The inflexibility of the system employed in these graded schools, whereby they fail to meet the varied wants of individuals diversely endowed or circumstanced.

The first two objections were strongly and thoroughly discussed by my learned predecessor. I will not stop to disturb his disposition of them, however far large portions of any party in interest may be from accepting his conclusions. Whatever disposition may be made of this subject by the people, we can not suffer our interest in our system of public schools to diminish. The existence of this system seems paramount to every other consideration which has been measured beside it, since it seems essential to the very existence of every other desirable interest in this land. Its discussion is not strictly a professional work, at least not exclusively such, but we shall have our day with the press, the rostrum, and the pulpit in its settlement.

The third theory was silenced in our Constitutional Convention, not because the feeling in its favor was not considerable, but because in no community have its possessors reached a manifest majority. Yet, that a strong antagonistic feeling on this subject pervades a large class of tax payers in many communities, is becoming more and more obvious. Indeed, in some communities, boards of education have seriously discussed the question of discontinuing their high schools, and in one city have passed a resolution to that effect.

In our country all error is dangerous. There is no power to compel obedience to right, except as the community which possesses the power to enforce obedience appreciates, not only the existence, but the importance of the right. Our only reliance for success is therefore upon the conviction of truth which pervades the community. To secure this, a more thorough discussion of the spirit and character of our plan of work is desirable. This can only accomplish its purpose when it reaches the people, and as few read our professional papers or reports, the daily and weekly press seems the most available medium of certain communication. Every educator knows the importance of a high school as a part of any successful system of elementary instruction. Every tax-payer and voter does not seem to know this. Educators can only claim protection and coöperation in their views, when they have secured clear convictions as to the correctness of their plans. We are apt to complain of the indifference of the press to the great interests of popular education. This is a great evil. But is not the source of this evil near our own doors? Are not the remedies measurably within our reach?

It is idle to dream of the continuance of our system of public schools after the destruction of our high schools. As well expect the body to live when the head is removed. Between the common school and active life there is a period in which a select number of youth desire to study. They are anxious for the culture and the honors of departments above the common school. The activities of life begin seriously to influence their thoughts and characters, and to stimulate them to manly action. A ripeness of culture surprising to the most experienced educators not unfrequently results, sufficient to give tone and position to a whole school system. The presence of this ambition and this incipient culture is itself a constant power through the whole school system and throughout the community. The influence of the scholarly spirit established by the expectation of high-school honors, pervades all the lower departments, and establishes the standard of scholarship and ambition in the school. Excellence in education, as in art, inspires a constant interest in all whose attention to it can be secured. A system without the influence of this ripe culture has never been able to produce good general results. The *very common* schools of the several states which have fostered academic systems above the common schools thoroughly attest this fact. The establishment of private schools for this higher culture, together with the lower grades that naturally, if not necessarily, spring up with them, encourage the introduction of notions of caste between rich and poor. In other cases it facilitates the frequent changing to and from the private school in obedience to every whim, thus destroying the excellent influence of promotion from grade to grade, rendering the public school far less effective of its purpose even to give a *common* education. The pupils attending this department of the school are the men who are to be the leaders of public opinion, the foremen and proprietors in our manufactories, and finally the managers of the leading interests of the community. At least half of them are now too poor to pay tuition, and would not attend a pay school. The association of this class in all the grades, but especially in the high school, and at an age when the character is rapidly forming, with those in better circumstances and of better home culture, is by no means the least advantage of the system. A degree of sympathy and mutual respect is established, that does much to harmonize the different elements of society, to do away with sectarian bigotry, and with bigotry against sectarianism, with party prejudice and pride of class, and to put every man on the footing in society to which his talents and attainments entitle him. The solution of the intricate and delicate questions of capital and labor will be greatly affected by the sympathies established, or which fail to be established here.

The separation of the youth of our communities, to go each his own way at an early age, may afford the superficial an opportunity to make a better show on their return, and it fosters superficial attainments. Their association up to and into the strength of manhood will keep them from the temptation to pretension and empty display, and will hold them to honest effort as the only road to respect.

The influence of the *alumni* of any well-conducted public school, is

also worth far more to a community than the high school costs. Understanding and confiding in each other, they are in an emergency the three-fold cord that can not be broken, and their strength is rapidly accumulating for good in many of our western towns and cities.

Besides these, the high school is the cheapest, and, at present, almost the only means of giving to young ladies and gentlemen culture and education enough in turn to teach the lower departments of the schools. The better the teachers, the better the schools. The better the schools, not only the *better* the scholars, but the *sooner* are they educated. If Ohio must give her youth *common-school* education, it becomes her to consider the means of doing it at the least outlay of time, and thus of money. Time is an element in this calculation that not only saves current salaries of teachers, but it encourages the productive interests of the state. A year saved to a generation of youth, is a mine of wealth to the community. In this preparation of teachers for better and prompter work, the high school again pays for itself, even supposing the state only bound to give a *low grade*, or *common* education to her youth.

But what American is ready to say that this *common* education is all we are bound to give our citizens? The Viscount de Maulèon, in Bulwer's "Parisians", dreads a conflict with the Prussian army, whose officers are *all* educated men. He sees that Napoleon had made a mistake, which it would take many years to rectify, in expending the treasures of France in the construction of palaces and boulevards, even though it *had* given employment to masses of men. There is a limit to this forced supply of labor and wages, and the end is still chaos. Liberty without intelligence, is as certain to degenerate into license in America as in France. Corrupting influences in society are as constant as the disintegrating forces of nature. Education alone can resist these influences. Nothing else has ever made liberty possible to a nation. This truth, like all truth, is eternal, and is never old. Only fools and the narrowest of selfish minds will writhe under its requirements, since it is benign and only benign to all. It demands money and labor to bless families and communities not our own. But this money and labor return as light returns from every object which it has quickened and beautified with its touch, to comfort, to delight, and largely to enrich the giver, since it multiplies ten fold the value of his treasures.

Custom and experience have fixed certain facts as to the amount of culture it is practicable to secure to our youth. Society has adjusted itself to the present system. At least the present amount of it is demanded, and it has never been furnished so well by any other system, so cheaply, nor with such beneficent accompaniments. Let us, fellow teachers, defend the integrity of our present system with all the fervor and wisdom that we can master. Let us carefully study any well-considered objections to these schools, and array the wisdom and strength of our communities in their defense by bringing them, if possible, into harmony with the best thoughts of good men on the subject.

Another objection made to our graded schools, applying, as is said, especially to our high schools, is the inflexibility with which they are often, and perhaps for the most part are likely to be administered; sac-

rificing, as is claimed, the pupil to the system, instead of seeking to adapt the system to the varied wants of the different pupils. I have never believed, and have for years found little inconvenience in not believing, that every member of a community should limit himself to my way of thinking, in order to attend my church or my school. There are those who believe, with John Stuart Mill, that the *present ordinary method* of teaching geography to young children is almost utterly useless, considered, at least, by the side of other subjects proper to the age of children engaged in this study. What right have I, then, to demand that my neighbor's child shall be subjected to the infliction which in conscience I might not be willing to impose on my own child? Or, again, by what principle of equity, law, or social right, can I say to a young lady who does not desire to study book-keeping, "You can have no instruction at all in these public schools?" And is chemistry of no use to her, because she has not time to study algebra? Can she derive no profit from the English literature taught in our schools, because she is unable to *master* Virgil, and does not care for a smattering of the Latin tongue? Is the attendance upon our schools, and especially in our high schools, so great that we can afford to pursue this course? Are we so sure, even now, that we have a course of study so thoroughly adapted to all the practical purposes of life, that we can give no further choice under any circumstances? If we are to believe the statements of very responsible publishers in Boston, even that city has suddenly discovered that her school authorities had been humbugging the community for twenty years with a system of art education, in which, in the language of these Boston citizens, "There is not one exercise that gives knowledge of value to mechanic or artisan." * * * "In the drawing of objects, the instruction is radically wrong." * * * "A system all head and no tail, and its use only resulting in poor picture making." And this, too, with the practical systems of Europe within a stone's cast of them; for does any one presume to say that Berlin and Paris and Stutgardt and Brussells had no system of drawing all this time that was of any value to a mechanic or artisan? Meanwhile, most educators of the West have perhaps done little better by wholly denying to the community any of the advantages of art culture. Yet the teachers of Boston and the West suddenly tell this community that the life of the Nation *now* depends on the immediate pursuit by every boy and girl in our schools, willing, unwilling, capable or incapable, of an entire system of art study, professedly new to the world and originating in this city, that has so long been near the art schools of Europe, and learned nothing better than that which is above stated by themselves. And so radical is this sudden requirement, that my constituents are forbidden to exhibit our modest work, because their superintendent has not convinced the community of the propriety of *so* pursuing this or any one of several other branches, in "all the grades of his school" that specimens can be "exhibited from *all* the pupils of each grade." I can see, with others, how the ability to draw will help any mechanic, any teacher, any inventor in his work. I agree that to all such the best of opportunities should be given to pursue this branch in preference to others, and that

many pupils seeking culture alone, may see their way clear to spend much time on it. But have we never read that "Art is long and time is fleeting"? Has not each one of us felt at times that some other branch of study than this or that was so valuable to *him* that it was really worth his while to turn away from every thing else to pursue it? And if we, why not others? What man is there of us that could in his youth have afforded to follow the details of our strictly-graded schools, learning *every* thing that *any* other pupils should learn. I am daily more and more impressed with the fact that it never would have suited my case. The fact is, that all kinds of culture are necessary to a community, but all kinds of culture are neither necessary nor possible to each individual. This fact is insisted on by the common sense and common practices of society. Its recognition in our schools will be a step toward rendering these schools subservient to the highest wants of practical and cultivated life. While it may interfere with some of that show of methods which cut all pupils to the same pattern, like a line of soldiers, or a page in a copy-book, all *m's* or all *h's*, it will induce more growth, because more mental activity. Each kind of culture will seek to do its part in society, will impart and receive by each contact of the special and delighted votaries of each, and the aggregate intelligence will be largely increased. As to the accomplishment of these desirable ends, it is often not so difficult as it might seem. When classes are large enough to divide, the want of proper care in the selection of teachers of differing culture, is the only reason why each moiety may not pursue a different study. A bigoted adhesion to grade is the only reason that I can see why, in a grammar and high-school course of two, three, or four years, one branch may not be taught in alternate years to members of different grades who may choose such study. Additional facilities for this variety may be secured by less strict adherence to district boundaries, permitting pupils to pass these lines for special instruction not attainable in every school.

Another point which has long been source of complaint, and still more a source of youthful impatience, leading to early withdrawals from school, is the infrequency of promotion or, better to put it, the distance between classes. A pupil finds himself put upon a year's course of study adapted to the average capacity of the pupils. This often implies that the course is too hard for one-third, about right for one-third, and less than the other third can easily do in a year. Yet, as in many school systems the measure of a teacher's capacity is the number of pupils out of a hundred which he promotes, and the per cent of correct answers given to questions relating to the course of study, the result is often a tedious repetition of class drills to bring up the lowest third of the classes to the required standard. To this repetition the best of the pupils must submit for days, and even weeks after it has ceased to be of any interest or use to them. The classes being a year apart, teachers hesitate to degrade the poor pupils so far, and the best ones find it difficult to jump a full year. Promotions once in five months would tend greatly to remove both these sources of trouble. This done, the teaching might consist more largely of other than mere class drills, a possibility quite welcome to an intelli-

gent and active minded teacher. In large cities only the arrangement, and not the number of classes, will be affected by this plan. In smaller cities the plan may necessitate larger districts for the grades above the primaries, and the half year grades may only be formed in alternate districts for the upper classes. The principal difficulty, as I conceive, is to secure teachers who understand and sympathize with true methods of teaching, who thus need as little as possible a system of espionage to keep them at work and whose judgment and sense of justice are reliable. Examinations are always requisite to test results, to establish and to illustrate standards, to secure the joy of recognized success, and to utilize the results of acquired skill in administering gratification to, and in inspiring efforts in others. The teacher that must have his classes examined each month by others, to make him work, is no teacher, but a upas, and he should be removed at once from companionship with youth. The teacher that takes the classes or the individuals which he promotes will soon make his place hot, and shame him into honest effort, or into obscurity. You will tell me that this looks too little like a graded school. I am sure that I reflect the sentiment of the best educated and most practical men in the other professions, when I say, that especially, so far as relates to the high school, and a couple of the grammar-school years, this will not furnish an objection to the plan. In the lower grades the election of studies is not so essential, but the frequent promotions seem to me to be very important.

I close this address with the suggestion that in our professional capacity, and in our capacity as citizens, it may be well for us to discuss more actively the measure recently adopted in New York to give greater efficiency to her school system, by a compulsory law. It will certainly be well for us to bring to the notice of our communities the noble work of Michigan in establishing a public state school for the education of the dependent children of their state. We seek to educate the dependent children of deceased soldiers. We do well. For besides doing justice to the noble dead, we enrich the state by doing it; we obviate crime and largely promote human happiness. Any one of these four motives would seem to be sufficient; three of the four are certainly enough to move us to the work. A large element in the sum of motives for a reform school, is pity for the incipient criminal. The miseries of destitution, especially as they are sources of crime, and thus of trouble, expense, and danger to the state, call as loudly for sympathy and for provisions against their legitimate results. The legislature has wisely passed a law *empowering* county commissioners to provide this instruction and training. We may do humanity and the state a great service by assisting in securing its advantages to many a poor child of capabilities for great usefulness and happiness.

Hoping that your deliberations may be characterized by harmony and a spirit of earnest inquiry, and may result in unmixed good, and bespeaking your kindly consideration toward my honest endeavors to perform the duties of the office with which you have honored me, I announce the order of the hour.

After a recess of five minutes, the President announced that Hon. O. Hosford, of Olivet, Michigan, whose paper on "Compulsory Education in Michigan" came next on the programme, was not present.

In place of Mr. Hosford's paper, Miss D. A. LATHROP, Principal of the Cincinnati Normal School, at the request of the Executive Committee, read the following paper on—

THE UNDEVELOPED AND UNDIRECTED POWER IN OUR PUBLIC SCHOOLS.

MR. PRESIDENT, LADIES, AND GENTLEMEN: What I have to say on this subject might, perhaps, be more appropriately said to a convocation of Principals and Superintendents.

And I beg to assure you at the outset, that there is that measure of intellectual and moral force treasured up in the possibilities of the great body of lady teachers in the public schools of the state of Ohio, as it has not entered into your hearts to conceive. Every crisis which has called woman to the front, has astonished us with the display both of her wisdom and her resources. You have but to let your mind run back over the events of the last decade, to recall multitudes of the most remarkable instances of her bravery, her firmness, and her discretion. Whatever views we may individually hold of the wisdom or success of the recent "Temperance Movement", we must all agree that it clearly shows that thinking women, indeed the great mass of women, are no longer feeble in conviction or in daring.

Into no deparment of public work have women entered in so great numbers, and so heartily, as into that of education. Indeed, until recently, it has been the only public field in which the best of the talent and education of the sex could find congenial and remunerative employment. Here women have distinguished themselves, especially so in the elementary department of educational work. That they are the best teachers of children is iterated and reiterated constantly, and nobody seems to question it, for the elementary schools are turned over to their tutorship by common consent. But what is meant by this laudation of women-teachers? Is it that they are best to take charge of classes of children, day after day, through the routine of opening school, recitations, recesses, and dismissal, and are not best to devise methods of instruction, to suggest courses of study, and to indicate and execute plans of school management?

The science of education is largely inductive, and, being based upon observed facts, it can be no more reliable than the data underlying its conclusions are valid. The successful teachers of children are the ones above all others most favorably situated to gather these data, and from them to develop that department of educational science pertaining to elementary work, as well as to announce the best methods for its practical application. The female teachers with whom the gentlemen before me are associated in public-school work, constitute a large body of the

most intelligent and energetic women of the state. It is no depreciation of the men engaged in teaching, to say that these women would not fall greatly below their own average in professional preparation, in experience, or in success. As a rule, they have a fair understanding of their business, and attend to it faithfully. The schools are as successful as they are, because their work is done honestly and unselfishly.

But a woman, and especially a woman who enters upon a professional career, is quite like her brother under similar circumstances. According to the measure of her enthusiasm and zeal, she is restless, aspiring, ambitious. The more enthusiastic and devoted, the more necessary to her is encouragement and recognition. Her constitutional "love of approbation" makes this even more necessary for her than for him. Every word or act of commendation is to her an intellectual tonic, vitalizing all her circulation, and compacting all the fibers of her mental being to stronger purposes and more resolute action. The young teacher almost invariably enters upon her work full of this beautiful enthusiasm. Success is infinitely more to her than salary, however necessary that may be. She aspires to distinguish herself and obtain recognition, but, as hope after hope of growth and preferment is disappointed, she quite naturally transfers this intense interest to something outside her school that will better fill her heart, and so she becomes less ardent, and possibly at last toils through her tasks with only a drudging diligence. "Pity and tears for her", to whom there remains only an inert submission to the same weary grind, month after month, year after year, decade after decade.

It is for this reason that you prefer the young fresh teacher to one who has taught many years. The field is new to her; she is hopeful and ambitious. But, gentlemen, it is not years but crystallization that makes the mischief in the schools. An original, inventive, growing teacher has few enough years at fifty. No woman is ever young enough to teach that has no elasticity, no tact, no enthusiasm.

In associations of this character, we hear a great deal of *poor methods*. There is, no doubt, abundant occasion for all the criticisms that are made upon the management and the teaching in our public schools; but admitting that they are not ideal, what then? How can they be improved? *I most cordially believe that, however perfect the educational ideals of superintendents and principals of schools, however much they may have read, or however varied their experience in elementary instruction, they as a body, or in their individual offices, can not create better methods in our schools.* Eminent success will not be secured by discussion of the comparative merits of mathematical and scientific study, of oral instruction and textbook teaching; not by determining any syllabuses of study or methods of instruction. Better methods will not be obtained by inviting ladies to hear your discussions, not even by interposing no objection to their taking part in them. Never by submitting to their plans made to hand for them, by lamenting poor work, nor by demanding good work. Methods given as directly and authoritatively as the ten commandments would fail utterly in their application, unless the heart of the teacher who is to apply them was in them. The best *method* the world ever saw

is practically as dead as one of the chrysalides hanging upon your garden shrubs, waiting for the summer sun to warm it into active life, until the earnest enthusiasm of the teacher quickens it. The *hearts* of the women teachers associated with you are not in *your* methods, never will be, never can be, while they reman *only* yours. *Your* methods, be they to you never so philosophical, are to them absolutely empirical, and no man nor woman of us all is so constituted as to become greatly inspired in doing mere routine work. Your associate teachers must be induced to make your plans their own, to identify them with their own thought; they must have the kind of affectionate enthusiasm for them which comes only with originating them, before they can work them to their own pleasure or your approval.

Besides, there is no "absolute best" in method. That is best which, under given circumstances, produces best results in the awakening of mind and development of thought, and gives most healthful impulse to study and investigation. Your methods are not necessarily good for me, nor mine for you. My habits of thought and action are different from yours. An ox is geared to his load by one device, a horse by another, and a steam-engine by still a different one, each adapted to its purpose. It takes us a long time to understand that *the teacher is the informing spirit of the school, and more potent than all methods.* A statement of the relative value of foods which should take no account of the presence or character of the life-principle which is to assimilate them, would be no more pointless and foolish, than a statement of what is best in methods of education, which has no reference to the character and qualifications of the teacher who is to use them.

But what is the point of all this? I have stated, *first*, that there is an immense amount of latent power associated with you, in your respective schools, which you need to avail yourselves of to secure the highest success; *second*, that these women teachers are conscious of the ability to do broader and better work than they are doing, and, consciously or unconsciously, are suffering for lack of it; *third*, that they have the ability to devise better plans than they are using, and their daily experience gives them the opportunity for working out educational schemes inductively, which is the only way they can be wrought out; *fourth*, that you desire greater efficiency in the schools. But that, however well you may do your duty, you are necessarily dependent upon your subordinates for the execution of all the details of school-work, and upon this success depends. They will execute no plans so well as those which seem, at least, to be their own.

It really looks as if the conditions of success are furnished to your hand, if you are wise enough to avail yovrselves of them. Your work is not so much to devise and indicate methods, as to inspire the teachers with whom you are associated with enthusiasm for the best work, and to give direction and encouragement to any originality and professional genius you may be able to develop. No one looking into the faces of the assemblies of lady teachers as they gather from time to time for educational purposes, can fail to believe there is talent enough in our schools to bring about such educational results as has yet never been seen.

You ask, How are these forces to be rendered active, and this enthusiasm to be developed? Those business firms are most successful which are careful, first, as to who is taken into their employ, and after, when an employé has thoroughly learned his business, and shown himself a "rising man", give to him a partnership interest. It is then "our business", and there is potency in the word "our." Every detail is looked after, because every man's interest prompts him to carefulness and thrift. He is either a partner or a candidate for partnership. The wise senior partner does not dictate empirically to the juniors how the business should be conducted, but constantly encourages them to submit business plans for mutual consideration and approval or rejection. He advises individual ventures and investments within certain limits, and so his firm becomes a grand business college for the training of young men. Such firms grow on from generation to generation.

It seems to me that something of this sort should obtain in a great school. The principal is the senior partner of the firm. If he gets the best work of which his associate teachers are capable, it must be by mutual coöperation. The plans and methods must seem to be their own, not dogmatically thrust upon them. *Hardship is not in what we do, but in what we are compelled to do. A principal or superintendent never makes a graver professional mistake than when in the pride of prerogative he habitually assumes to dictate plans to his subordinates.* No course can be pursued which will more certainly kill every aspiration to originality and enterprise, and make only droning copyists. Besides, very few men in such positions are wiser than the combined wisdom, or greater than the combined greatness of the quick-witted, sharp-visioned, practical young women with whom they are associated. He is but a tyro, if not a fool, in his calling, who does not seek by every means to add all their vital force, sharp insight, and power of adaptation to his own stock of zeal and genius.

But I hear some gentleman say, "You mistake entirely. I do not dictate to my teachers at all. They are free to work out their own plans." No doubt you are correct in the main when you say you do not over-rule your teachers; but I pray you to answer without prejudice, what motives are you bringing to bear upon them to induce originality and growth? What are the most potent motives to influence the best men? Are they not, first of all, acknowledged success, and second, remuneration? Every woman who has any moral right to enter a schoolroom, starts out, as I said before, regarding success much more highly than salary. It is only when there seems to be nothing in the immediate future to which to aspire, that aspiration ceases. You complain, and justly, perhaps, that lady teachers are not broad in their comprehension of theories of teaching, nor exhaustive in their knowledge of its art. But suffer me to put the question plainly, what impulse is there to such study and practice? Who takes cognizance of originality of method, and praises the effort,—standing, if need be, between the commendable attempt and the practical failure? Are not percents and general appearance—that is, results—the things which are scrutinized? It is not *ways* but *ends* that are investigated, and, therefore, *ends* and not

methods are sought. While it is true that percents are valuable for what they can do, namely, for showing results, they are dumb as to how the result has been accomplished; consequently, under such tests, the *what* is always taking precedence of the *how*. Those who begin teaching impressed with the importance of seeking the best ways, finding results only commended, cease to "watch", and so "enter into the temptation" of securing these by the shortest and surest paths. If so much book-learning, neatly written upon paper and duly signed by the pupil, is the end sought, why be exercised about methods at all? But if the method be important, why not let it have its proper weight in determining the standard of the teacher? Encouragement to originality, recognition and commendation of excellent plans, emulation, confidence,—these are the prophetic winds which will cause the exceedingly dry bones of rote-teaching to live.

Suppose one of your own number, full of enthusiasm for philosophic methods, tempered by such skill in his calling as to command the respect and confidence of his associates, united with so much tact as to control them while seeming to leave each free, suppose such a one should call together his teachers, department by department, and heartly commend what he has observed well done, referring to any faults he may have seen with so much of delicacy as not to wound or discourage any. Then expressing the conviction that better work can be done, he asks Miss A. to draw up for her grade a series of lessons in arithmetic, noting her formulas and methods of teaching. Miss B. is asked to do the same in grammar, Miss C. in reading, etc. He arranges that when they have thoroughly tested their plans, there shall be a meeting for report and discussion. When this day arrives, the principal or superintendent commends what is good, and points out such defects as he sees, but, instead of whittling any one down to his pattern, removes obstacles, praises effort, and starts every one off full of fresh zeal for another season of healthful emulation. He recognizes excellent work by sending his teachers to visit schools in which anything is particularly well taught. He shows his teachers in every way possible that he appreciates every effort to improve. Think you teachers would be dull, plodding workers under the stimulus of such supervision?

But some gentleman says, "We must have uniformity. If every teacher were encouraged to pursue her own plans, we should be in the midst of fearful disorder." I think you are wrong. Not any more of disorder, I trow, than there is in the tree when the spring sun starts the sap up the thousand avenues of its trunk, and quickens every bough into leaves and blossoms. It is not disorder that you see, but activity. Uniformity, essential as it may seem, is not the most essential thing. Life is more important, and since the choice is between absolute uniformity and life, there can be no hesitation. But an impulse to originality and self-reliance to experiment even, is not inconsistent with all the uniformity necessary in our schools. Will you pardon if I refer to some personal experience which will illustrate my meaning?

I think nobody questions the justice of according to the little city of Oswego, northern New York, the honor of originating the great educa-

tional revival which has been making itself felt over the entire country during the last decade. Not that all the educational schemes propounded there have been adopted, any more than were Pestalozzi's own,—not even that the best educational work has been done there,—but the recent impulse to more rational plans and philosophic methods originated there. The idea that the prevailing methods of elementary instruction were totally at fault, and should be radically changed, took such possession of one man that it gave him no rest. He read and pondered, and pondered and read. But how should the change be wrought? Where was the person competent to lead in the better way? A heaven-sent idea, when it fully captures a man, gives him no rest until it is embodied so that the world may use it. So reflection compelled action, and he said to himself, "I have a body of faithful and earnest teachers. Why not confide to them my convictions and hopes, and let us see what we can do together. I am certain I can do nothing without their coöperation." Accordingly he called his teachers together, and laid this matter of such deep interest to himself before them. Every earnest one said at once, "If you have any plans for us, let us know what they are, and we will see what can be done." He said, "I have no definite plans. There is too much rote-teaching, mere memorizing,—I am sure of that. There is too little attention given to the study of things, and too much reliance placed upon mere words. There should be more illustrative teaching,—of this I am certain. There is not enough care taken to secure the concise and correct expression of the pupil's thoughts in his own language. I am convinced that education does not consist in the ability to recite the language of a text-book." All these seem like so many truisms now, but their statement was new to us then, and startled us greatly, and we said, "What shall we do?" He said, "Make a note of the points I have mentioned. Grammar, geography, reading, and spelling are taught the worst. Make these subjects matter of special thought in your teaching the coming week. Next Saturday we will have an experience meeting, in which I wish each one of you to speak of any new idea or plan that may have occurred to you during the week. I will visit as much as possible, and report what I have observed, and we will see if we can open up any plans for better work." I need not trace the history step by step. It is sufficient to say that the bent of every teacher was watched as carefully as a parent ever watched his family of growing children. As soon as he discovered a particular interest on the part of any teacher in any subject of school study, he said, "Give special thought to this. Prepare a plan for a course (if grammar, on verbs, for instance) and let me see it." As soon as the work shaped itself sufficently, every enthusiastic teacher was set a responsible duty. She was elevated temporarily to the position of teacher of her associates in her specialty, while she was then taught in that of another. I do not believe such educational enthusiasm was ever developed before, nor so much hard work done in the same time. It came finally to that, that we desired to meet every afternoon for instruction, criticism lessons, and discussion. I remember very well the day and circumstances under which one of the teachers asked him if he could not persuade the board of

education to permit us to open school in the afternoon at one o'clock and to close at three, so that we might meet from 3:30 to 5:30 for study. You that know Mr. Sheldon can imagine how he opened his surprised eyes, as if he would really comprehend whether his project had taken such hold of the hearts of the teachers. He said, "Do you think the teachers desire it?" When assured that they did, the arrangement was made, and we taught each day till 3 o'clock, then gathered into one of the school buildings, and spent two hours in study. That work gave ultimately to the schools of this country the "Sheldon's Manual" and the "Object Lessons." There the foundation of Guyot's Geographies was laid by Mary Howe Smith, then teaching in a grammar school. There the Sheldon's Readers had their origin. Out of this beginning grew the Oswego Normal and Training School, which is the mother of all the training schools in the country, and of many of the state normal schools. Of the fifty teachers in the Oswego schools, a large number, from the impulse then received, have acquired a national reputation. Very few who have remained in the profession have failed to achieve eminent success. I need only to name Mary Howe Smith, Misses Matilda S. Cooper and Ellen Seaver of the Oswego Normal School, Misses Helen, Mary and Kate Davis, Clapp, and Funnell, all of whom came to the west to take charge of Training schools, Miss Lewis of the California State Normal School, Miss Mary V. Lee, formerly of the Winona Normal School, recently a graduate of medicine from Michigan University, Miss Jennie H. Stickney of the Boston Normal School, Miss Roe of the Cortland State Normal School, Miss Seeber in charge of a mute school in our own state, Mrs. Randall Diehl, etc., etc., to indicate the power of this educational revival in its very beginnings. I think it no exaggeration to say that three-fourths of the whole body of female teachers were called from Oswego to prominent positions in normal schools. These ladies had no more ability than the average lady teacher in your own schools, many of them had less of culture, and certainly they had almost infinitely less of educational opportunity. *It was enthusiasm, effort, purpose.* Such enthusiasm with our opportunities would make any city of Ohio an educational Mecca in five years. But I repeat, and would emphasize it, this will not come to pass by any rearrangement of courses of study, or well laid schemes of conventions of superintendents and principals. Revolutions begin at the bottom and work up. Educational progress is no exception to this law of social science. You must set your associate teachers to *doing*, not only in their schools, but in the teachers' meetings, rather than require them to *listen* to you. You may not be edified by their efforts, but they will repay your confidence and patience with the vision of growing character and efficiency,—first the blade, then the ear, and eventually the full corn in the ear.

I beg you to believe me, that I am introducing no special pleading for any class of teachers. I speak for the schools themselves, and indirectly for the principals and superintendents of the schools. I most earnestly believe that only in accordance with the spirit of these suggestions will our schools take advance ground, and only so will you reap the reward which is the impulse toward and expectation of labor faithfully and enthusiastically performed.

DISCUSSION OF MISS LATHROP'S PAPER.

E. E. WHITE: When requested this morning to open the discussion o this paper, I hesitated because I always dislike to speak in public after a lady. As the finest crystals of snow are always formed nearest heaven, so the finest thoughts are formed in the soul of woman. One of the difficult problems in the management of graded schools is to subject a corps of teachers to efficient supervision, and not reduce them to operatives. This question is ably and fully discussed in the excellent paper to which we have just listened. All who have observed the progress of graded schools, will agree that there is a tendency to mechanical teaching, and this tendency is difficult to resist. It has its origin in the fact that it is much easier to impose methods on teachers which shall secure uniform results than to secure necessary uniformity through methods which are the teachers' and which are vitalized by their spirit. The more I see of teaching the more I am convinced that true education is not possible by mechanical methods. We may produce results that will show in percent tables, but we can not truly educate in this manner. The human soul is not touched by the revolving cogs of this dead mechanism. It is the contact of the living teacher with the pupil, the breathing into his methods his own inspiration, that can give the best results. All observing teachers have noticed the great difference between the high per cents reached by pupils in examinations and the actual power possessed by them. What is the explanation? I think it was given in the paper. It is the result of mechanical teaching. Hence supervision should encourage every teacher to put forth his best effort, and should inspire him, not to imitate the methods of another, but to ascertain for himself what is true in principle and most efficient in method. I am satisfied the paper does not overstate the difficulty. There are thousands of lady teachers in our schools doing mere routine work, following prescribed methods in teaching as faithfully as the operative follows the pattern in weaving carpets, and, at the same time, knowing that they can do better work. A few years since I visited the schools of Philadelphia. The principal of the first school in the city, a lady, said to me in reply to an inquiry for the reason of giving so much attention to several comparatively unimportant subjects, that she knew she was not doing true work, but the authorities over her required her to send her pupils up to the high school prepared to answer certain questions, and that her efficiency and success as a teacher were measured by the result. She was simply "*preparing wares for the market.*" That lady expressed what thousands of teachers feel. They are not doing what they believe is true teaching, but they are meeting the conditions imposed upon them. They are preparing their wares for the market. If the principles so admirably stated in the paper can be embodied in the supervision of all the schools in this country, we shall see a great change in the efficiency of our teaching, not perhaps in higher percents, but in true education. I have observed marked progress in this direction for a few years past, for we are not breaking new ground this morning. All through the state there is less of this mechanical supervision, less of this imposing of methods on

teachers, and more effort to awaken in the teacher the true artist's spirit and power. Teaching is the highest art, and the true teacher is the artist of artists. The teacher must be free to do his best, and in his own way, and to this end there is really no great sacrifice to be made in uniformity. We may demand necessary uniformity of *results*, if we leave the teacher free as to the *methods* to be used. But if it comes to this, that we must choose between true teaching in our schools and a dead uniformity, give us the life and let the uniformity go. [Applause.] I am satisfied further that those who have paid most attention to education will agree we have not reached any such conception or comprehension of what is true and best in this great art, that any can assume to dictate principles or methods to others. We need to call out and unite the earnest inquiry and experiment of every laborer in the profession. When this professional spirit is aroused in every teacher in his or her own position, the truest progress in investigation will be made and the truest methods will be used. Thus will teaching reach a perfection and power not yet realized. The teacher must be animated with the feeling so beautifully expressed in the paper. Under God the teacher is responsible for his best efforts and best work. He enters the schoolroom under two contracts, the one made with his employers to do his work for so much money; the other is the higher contract—a contract with every pupil under his care that he shall receive the highest possible good, and go out strong for life's duty and life's struggle. [Applause.] The teacher needs to rise to the conception of the responsibility resting upon him, expressed by the great Prussian educator, who, when he took office, resolved before God that he would so discharge his duty that, in the day of judgment, he could look every child of Prussia in the face, and say, "I did what I could to give you the best possible Christian education." I can most heartily commend the paper, but it does not need any commendation. It has touched all our hearts with a fire that I trust will burn with increasing warmth in our work. [Applause.]

JOHN HANCOCK: While I agree entirely with the general views expressed, Mr. White's comparison of the teacher to an artist, raises in my mind this question, How is one to draw a picture who has no skill in handling tools? How is one to make a grand picture who has no imagination to fill out its outlines? How is the teacher to originate methods that knows comparatively little of the subject he teaches and comparatively nothing of teaching? It seems to me that the teacher, after all, is the central fact, and is worth more than all methods. The great difficulty under consideration is due to a want of knowledge of the subjects to be taught and a want of thoroughness in preparation for teaching. How is he to teach arithmetic who can not solve a single problem? How is he to teach science who knows nothing of the elements of science? It is said that this is a grand work, and it is the grandest work men can engage in, but teachers must bring to that work attainments commensurate with its grandeur, or we shall do little. I know not what Miss Lathrop meant by the two hours' study each day—whether the study of branches or the study of methods, but I am quite sure that this is the

spirit that we must have, if we wish to arrive at the end so well set forth to-day. The thing that we need most is to know more and to think more about our work—a better preparation for it. I believe that we shall come to this conclusion, that we shall never reach this point until we have in Ohio more normal schools, more schools for the training of teachers. [Applause.] Not until we can send into every school a skilled teacher, a teacher of the best mind and highest thoughts, will we be able to solve the great questions that lie at the bottom of all successful teaching. We have an example of that kind in the essay just read, and I trust the day is not far distant when we shall make the people of Ohio feel that normal schools can not be longer set aside, that they are absolutely necessary to carry on the work of public education.

President TAYLOR, of Wooster University, being called out, said: It is with a great deal of embarrassment, as you will readily understand, that I present myself before the teachers of Ohio. Being a native of the state, and a resident of it for the greater part of my life, I have taken a very great interest, a very great pride in the success of the schools of Ohio; and when I have gone to other states, as has been frequently the case, I have been deeply interested in learning the high estimation in which the teachers of Ohio are held. Having been for the greater part of my life outside the profession, I can bear this testimony as a disinterested witness to your success. This is the true theory which has been presented to us to-day. We have perhaps less of this difficulty in our colleges than in our schools, because it is not expected of the president of a college that he shall exercise as much authority as the superintendent of a school, for the reason that our teachers are expected to be better prepared than many of the teachers in the public schools. Of course you understand that many teachers who enter the public schools, have had very little experience in teaching. That renders it exceedingly important that those who have had considerable experience in teaching, should supervise their work. It is very important in the development of the teacher that he or she should be developed according to the individual powers possessed. Each teacher must be a teacher *sui generis*. You can not make teachers after one model. As an additional illustration of the argument so ably and admirably presented this morning, I would remark that every teacher, in order to bring forth that latent power, must be allowed to develop that power according to his own method under the general principles and general systems of education. I have seen a good deal of effort to bring all teachers up to one standard and along one line, but it can not be done. You may have certain fashions, but you hardly ever know two ladies to be dressed exactly alike, though they may dress after the same fashion. There is a general fashion, you know, but then there is a peculiar cut and variety for each individual. So, with regard to teaching, there is a peculiar development in individual teachers. The relation between the superintendent and the individual teacher is the best when it secures, under general supervision, the peculiar individual development of each teacher according to the line of his own power and the peculiar faculties appertaining to

that individual. This is further illustrated by the fact that each child is an independent factor in itself. Just as the teacher, so the child must be allowed to develop in his own way. There must be a thorough understanding in the teacher of his own nature and powers, and of the way in which he can best reach the scholar. Some years ago a friend of mine started out to preach. He had graduated at a seminary, and understood the general theory of writing sermons. His father was a practical man and a minister, although that does not necessarily follow. [Laughter.] He said to his son: "You are just out of the seminary, having taken the theological course. Now I suppose you think you can preach. You understand probably the general outlines of theology, church history, and other departments. You know something of how to get up a sermon; but let me just tell you one thing that has not come from your instructors. Preaching the Gospel is the application of truth to man. you understand the truth perhaps, but what do you know about men? How much do you know about human nature?" The young man said he was well acquainted with one young lady and had several other lady friends. [Laughter.] He knew a number of boys in college. His father said to him, "My son, let me give you a piece of advice. Find the roughest possible field you can find. Go out to some town and take a little church, and spend two or three years in going from house to house, in studying the people, and trying to understand what human nature is. You have to learn the great book of human nature as well as the great book of God before you can preach successfully." That young man started on that line, and, after a few years' experience, he found out that there was such a thing as *human nature* that needed to be thoroughly understood before a man could be a practical instructor in any deparment. Now this theory presented to-day demands two great facts—a thorough understanding by each teacher, and the privilege of adapting his own methods to the wants of those under his care. One teacher will do it in one manner, and another in another. One teacher will win the affections of the scholars; another will inspire them with enthusiasm; and another has not either power in his nature. Every one must seek to develop his own powers under the general system. [Applause.]

President HINSDALE, of Hiram College, being called out, said: I have not often met the members of this Association in their annual conventions, and I am very glad to have the opportunity of meeting you here under the exceedingly pleasant and profitable conditions that surround us. I have listened with very great satisfaction and pleasure to all the exercises thus far, and especially to the paper which is the subject of the present discussion. The great lesson of the paper, if I grasp the scope of it, is the necessity of thorough-going, conscientious work in the schoolroom. It is a needed blow aimed at the mechanical method of instruction which, whatever may have been done to remove them, still exists to a very much greater extent than is desirable in all our schools, from top to bottom. It occurs to me that the line of argument so admirably presented in the paper, reaching the conclusion that superintendents and principals should not be too authoritative and *ex cathedra*

in their relation to their subordinates might be applied to another set of relations—the relations between teachers and pupils. If we have reason to believe that there is too much pride of intellect and imposition of forms and methods, so far as the superior officers of our school system are concerned, is there not, on the other hand, some reason for believing that there is not enough scope given to the individuality and versatility of pupils who are brought under the instruction of the great body of teachers? If a teacher must have some scope and freedom, some liberty, why not go further, and affirm that we shall never obtain the best results and the richest and the ripest fruitage until so much of liberty and of freedom is allowed to the pupil as shall give scope and range to whatever versatility and individuality the pupil may possess? I do not appear here to-day as the censor or the critic of the system of graded schools as they exist in our own state and other states, but I am free to say that I have sometimes observed what struck me as a sort of educational ritualism, which was at once thoroughly inimical to the bringing out of the best results.

We have had a good deal said and written of late with regard to the science of education, and I have sometimes queried in my mind in how far it was possible to reduce education to a science. If we use the term science in the sense in which it is generally understood, I am constrained to believe that education can not be made a science. The term science implies a certain amount of precision and uniformity which I verily believe we can never have in the work of education, unless much of the more valuable results are lost, I do not wish to be understood to say that there are not certain great principles in accordance with which the human mind must be developed, that many valuable hints and principles have not been established, but I do wish to express my doubts as to the possibility of there being any such thing as the science of education in the ordinary restricted and technical sense of that term. I will not pursue the discussion of that matter, a matter upon which my thoughts have sometimes dwelt. I commend it to the members of the Association as worthy of consideration. I am also constrained to believe that, in education as in other matters, forms, methods, plans, and appliances come in vogue, and are used for a while. They become in time mechanical and artificial, and it is found necessary to change simply to bring in a new state of things in order that we may have freshness and life. Of course this is always to be done, if done at all, in subordination to the great principles upon which the whole educational work is to be based. If there be any science of instruction or education, I am well satisfied that one of its fundamental principles will be found to be, that it is utterly idle to aim at a uniform plan or method or form of procedure. One physician can not exactly handle patients as another, supposing that they are both good physicians. One minister can not preach exactly as another, provided both are good ones. And two teachers, provided both are good ones, can not use the same methods and appliances, as has been well said. There is something in the teacher, in the living forces which reside in him, and it is only when plans and methods and appliances are touched by this living force that they are vitalized.

A young man, who was just entering upon the work of preaching the Gospel, heard an old clergyman preach a sermon with which he was very much pleased, and, as the young man had an appointment to fill in a distant place a week or two after, and as he was very sure he could not write or prepare as good a sermon himself, he asked the clergyman to lend him the sermon to which he had listened with so much satisfaction. It was done. He went to the distant community, stood up in the presence of the congregation, and read the sermon. He came home very much crestfallen, and when the old clergyman asked how he had succeeded with the borrowed sermon, he was obliged to confess that he had made a failure. The old gentleman simply said, "There is something in the fiddle-stick as well as in the fiddle." [Laughter.]

On motion of W. D. Henkle, of Salem, it was ordered that a committee of nine on place of meeting next year be appointed.

On motion of G. S. Ormsby, of Xenia, it was ordered that a committee on resolutions be appointed.

On motion of R. W. Stevenson, of Columbus, it was ordered that a committee of eight be appointed to nominate officers for the ensuing year.

On motion of J. M. Goodspeed, of Athens, it was ordered that a committee of three be appointed to communicate with teachers and those wishing to employ teachers.

Adjourned till 2 o'clock, P. M.

Afternoon Session.

After the Association was called to order, the President announced the following committees:

On resolutions, G. S. Ormsby, of Xenia; R. W. Kilpatrick, of Ashtabula; G. N. Carruthers, of Chillicothe; Aston Ellis, of Hamilton.

On nomination of officers, R. W. Stevenson, of Columbus; John Hancock, of Cincinnati; J. F. Lukens, of Portsmouth; G. W. Walker, of Lima; J. M. Clemens, of Wooster; J. H. Loomis, of Napoleon; J. A. Jackson, of Springfield; M. R. Andrews, of Steubenville.

On place of next meeting, W. D. Henkle, of Salem; A. T. Wiles, of Zanesville,; M. S. Turrill, of Cumminsville; C. L. Hotze, of Cleveland; C. L. Loos, of Dayton; T. J. Barton, of Ashland; J. H. Grove, of Wilmington; E. T. Tappan, of Gambier; F. M. Ginn, of Clyde.

On communication with teachers and those wishing to employ teachers, J. M. Goodspeed, of Athens; H. M. Parker, of Elyria; D. P. Pratt, of Massillon.

The discussion of the President's address was announced as the next business in order.

DISCUSSION OF THE PRESIDENT'S ADDRESS.

ELI T. TAPPAN: I wish to call attention to what was so well said by the President in regard to the flexibility of our school system. Some of us remember that when the system of graded schools was introduced into our towns and cities, the great point urged in its favor was, that bringing many hundreds of children together, the work could be done just as well and a great deal cheaper by means of a perfect system of gradation—that there was great economy in the graded system of schools. We have reaped the benefit of the experiment, but we now find the extreme to which we have gone in thorough grading, needs correction because there is too little flexibility in the work; too little regard paid to the difference which exists between individual pupils; too little attention paid to the separate human nature of each child. I have heard one who ranks among the first of our Ohio teachers speak of this as one of the defects which the graded school system can not overcome. It has been alleged that the graded system requires such uniting of many under one method that it was impossible to do entire justice to each individual and to teach each child in that way and according to those methods which are best fitted to develop individual character. It appears to me, Mr. President, that that problem is now before us. Our system of public schools, with all the grades united in one system in a town, should be so managed, that while we are doing the best work, and in the most economical way for the mass, we can do full justice to the individual. I say, that is the problem now to be worked out. I am glad it has been presented by yourself to-day. There must be more flexibility. We must meet the individual wants of pupils, and any reasonable demand that may be made by the parents or guardians for distinct courses of study. I am not only speaking of high schools, but may we not permit election in the courses of study, somewhat, in schools that are nearer to the primary schools? There is, no doubt, a general course which every child ought to take, but we carry this, perhaps, too far. There has been much talk, for a dozen years past, respecting a closer union between the schools and the colleges of Ohio. I have very little expectation of much being done in this direction, unless classical culture is commenced at an earlier age in the public schools. Those parents who intend their children to take a classical course of study, will have them begin the study of Latin at an earlier age than it is usually begun in our public schools. Can this be done and not produce disorder and confusion? It will not do to allow children to go from one study to another at their own option. It must be regulated. It must be kept in bounds. I submit that any such election should be allowed to occur only once a year, and then only with the consent of certain school officers. My object is simply to suggest this one thought, and leave the further discussion of the President's able address to those who are better prepared than myself to speak upon it.

Miss OAKES, of Springfield: I do not desire to speak, but I would like to hear some one speak on the question of more frequent promotions. This may come up in connection with high school instruction, but it ought also to be considered in connection with the lower grades. I think we are making a great mistake in having so infrequent promotions in the primary schools. I know that in some of the schools promotions are made frequently. It seems to me that the course of study laid out for a year is too much for one-third and entirely too little for another third of each class. In view of all this, I think that the teachers of the state ought to discuss thoroughly and seriously the question whether promotions ought not to be oftener. It is evident to me that great injustice is done to many who, having but little time, and being out of school a long time and able to do hard work, are kept a whole year in a grade, when there might be promotions at least twice a year in the same grade. I think that if some of us had not received a little judicious promotion for merit, we would not have gone through the college course in the time we did. I think that I owe much to judicious promotion, and that many who are here have great cause to thank superintendents and principals for the same thing. I wish that some one would speak on this subject.

GEO. S. ORMSBY, of Xenia: I have been greatly interested in the remarks made this morning and those that have been made this afternoon upon the subject of the flexibility of our school courses of instruction. I have noticed that teachers are very much like other people—that we vibrate between two extremes. We have been for many years trying to organize our schools into a perfectly graded system. We have succeeded in doing that, and now it is proposed to make them more flexible. It seems to me we can not adopt an elective system, to a very great extent, below the high school. Our course of study in the primary school consists of reading, writing, arithmetic, geography, and other necessary studies, and it seems to me that there is no place for election. The teacher, if he is competent, must choose the studies, or the text-book committee or somebody else must establish the course. The pupils must be made to pass through the established course of study—pass through every study of the course. In what, then, must this flexibility consist? In the same class we have various grades of mind, and we can not put the stupid scholar or weaker mind through the same course of study *as rapidly* as we can the brighter and stronger mind. In our inflexible course we try to pass all through in small platoons, and if any fail to keep step they must go back at the end of the year and march over the ground again. This is what may be regarded as inflexibility, and I think that more flexibility should be secured. But to permit pupils to choose their studies in the grades below the high school will, as it seems to me, break down our graded system. The studies embraced in these lower grades are what children all should know, and every child ought to be made to pass through and understand them. President Tappan suggests that Latin and some other higher branches may be brought into the lower grades. That may be well, but I do not

think that this is properly an election of studies. I make these remarks simply that we may be warned against committing an extreme which we are very liable to do when we enter into a discussion of this sort. The course of study pursued in our primary schools includes those studies which are best adapted to the wants of the pupils. In the main it does not matter *what* children study before the age of thirteen, so much as *how* they study. The great point is to make children THINK. That is what educates. The mind is so constituted that when it perceives the truth clearly it is made stronger thereby, and our great object is to bring the mind of the child up from the primary grade in such a way that he may see clearly every truth that has been presented to him in all the steps of the grade. Then as he passes along he is able to receive those higher truths that may be presented to him, and this prepares him for that higher education spoken of yesterday.

J. H. LOOMIS, of Napoleon: I have been trying to reconcile the theories that have been presented here, with the practical working of our schools. In my own town, and in the graded schools in the smaller towns generally, a single teacher will have from seventy-five to one hundred pupils. It is impossible for him to do half the work that is required on the present inflexible plan. Now should an election of studies be introduced, teachers could not do half as much as they are doing now. In order to accomplish as much as possible in such situations, it seems to me necessary to secure as great uniformity as possible. In the so-called high schools of our small towns the superintendent of the school has to do most of the teaching, while perhaps one-sixth of his time is devoted to the superintendent's duties. If the course of studies is made elective, you only make the matter worse for teachers and superintendents. A single teacher has now to act as a whole faculty, and it seems to me it would be next to impossible to attend to this increased work until the people get rid of some of their notions in reference to economy in school matters.

C. W. OAKES, of Bellefontaine: A few years ago we attempted to borrow a great deal from the school systems of other counties. That was the great mania—trying to bring our schools up to the standard of those of Germany and other countries, and, in doing this, we borrowed, among other things, the system of yearly promotions, having but one grade in each school, and promoting the pupils yearly to a higher grade. I believe that a majority of superintendents will bear me out in the assumption that our effort to do this in our schools, has been a failure. It may be successful in Germany where they have no system of election, and where the instruction given is generally oral, but we have found it is better in our schools to have two grades, separated by four or five months, and then promotion becomes easy. I tried the plan of having but one grade in each school, and found that, though it was best for the teachers, it had no flexibility in it for the pupils, and because of that many were kept back. One-third of a school perhaps must be held back, and another third put forward too rapidly. In this way there was a tendency to bring all down or up to one standard, which was impossi-

ble. The system of promoting twice or three times a year works much better. In the lower grades it ought to be more than twice a year, though in the higher grades this may be as often as is practicable.

At the close of the above discussion, Mr. WM. WATKINS, of Dayton, read the following paper on—

ILLUSTRATIVE TEACHING.

A modern writer remarks that there is nothing good or lovely or desirable which is not strong. But the race is not always to the swift nor the battle to the strong, for the valiant soldier has need also of knowledge. The aim of all instruction is to impart such knowledge as shall make those who are taught stronger and more skillful. Through knowledge of the mechanic powers and of the elasticity of steam, the inconsiderable strength of man has been multiplied a thousand fold. Skill, too, as well as strength, has its source in knowledge. The accomplished penman differs, as we are used to think, from the schoolboy whose wretched scrawl is scarcely legible, in skill. But does not the use of this word skill deceive us? It is in knowledge that these persons differ. The one knows the forms of the letters and how to produce them, and the other does not.

In the same unthinking way we are content to ascribe the marvelous rapidity of the accomplished accountant to skill, satisfying ourselves with some vague idea that this skill comes from practice and unwilling to acknowledge that this man knows more about numbers than we do. The athlete who surprises us by his feats of agility and strength, has the same bones and muscles as we, and perhaps not greater physical strength, but he differs from us mainly in that he knows the full control of his body, and we do not.

Skill is, in short, impossible without knowledge. Skill is necessary to the successful conduct of life. If there be any knowledge which does not produce skill, such knowledge is valueless for any purpose, and is unworthy to engage the attention of man. Knowledge is not the power of repeating words; for all know that, like several of the lower animals, man is capable of repeating words without any association of ideas.

We shall not err as teachers, if we consider that all knowledge comes from observation and experience. Without entering into the discussion as to whether or not there be innate ideas, we shall be safe if we act upon the supposition that all knowledge comes directly or indirectly through the senses. Let us regard it as our business to improve our pupils in knowledge, and whether this knowledge be of the external world or of themselves, or of their duties to their fellows, we can only build with certainty and safety upon the foundation of observation and experience.

It is a fact of the highest importance to the teacher, that knowledge can not be directly communicated from one mind to another; for knowledge is the result of observation and experience, and these are not transferable. My friend may say to me, that he has observed so and so, or felt or thought thus or thus, by which his knowledge has been greatly

increased, but he does not thereby communicate that knowledge to me. I may have observed, felt, or thought the same, but without reflection upon its true significance. In this case, my knowledge simply passes from a latent or unconscious state to a conscious state. I gain not knowledge, but the consciousness of knowledge. I knew that before, but did not know that I knew it.

Now there are but three methods in which we may instruct. We may rouse latent knowledge to consciousness, or may bring the subject under direct observation of the senses at the time, or may place the subject in the light of former observation and experience or in the light of reason. We shall better understand our subject if we consider each of these separately.

We should not fail to give due recognition to the importance and utility of the first method of teaching. Knowledge which lies in the mind latent and unconscious, is of no practical value to its possessor, but when made conscious, it at once adds to his wealth. It is good that the thinker should spread before us the results of his laborious thought. The thoughts are his; he has created them by his own labor, and can not give them to us; but we may, by our labors, arrive at results greater or less than his, according as our observations and labors in that field have been greater or less than his. He rouses us to the consciousness of what we know upon that subject. So also the glowing pictures of poetry and the empyrean flights of impassioned oratory are valuable and useful to us, because they encourage our minds to attempt the same. When the sage embodies the results of his life in one pregnant sentence, that sentence may not make me wise unto life, for I may be without that rich experience and careful observation which has distinguished him. But if I have had an experience differing from his in degree, but not in kind, the expression of what he has thought and felt may become the beacon light of my life. The expression of the true, the beautiful, and the good awakes an echo in our hearts, and calls upon us to be ourselves true, beautiful, and good. "He", says Carlyle, "who shows me the achievements of a brother man touches my lips with a live coal from off the altar."

He, therefore, who awakens our latent knowledge and makes it conscious, who brings up for reflection and future guidance the results of our own experience, who calls upon us to follow him as, dipping his pencil in the deepest colors of the human heart, he depicts our most secret passions; or he who, spreading his fearless pinions, invites us to excursions wide over the wasteful deep of speculative philosophy; or he who bids us stand with him high on the mountain of science to behold the mystery of the cosmogony creation, tracing the silent operations of that Creative Spirit with whom a thousand years are as a moment, and whose plans of evolving the strong from the weak, the high from the low, and the good from the evil, fill the soul with awe and worship;—all these, though incapable of either their experience, their feelings, or their grasp of the subject to us, do yet, because we are in degree like them, awake answering echoes in our breasts.

But we must not forget that this effect is ever measured by the state

of our own minds. We argue that that teaching which aims at rousing latent knowledge to consciousness, is often greatly useful, but that, by its very conditions, it requires that the person taught shall have almost reached the state in which the teacher stands. The difference between the teacher and the taught is more in consciousness of knowledge than in knowledge itself. That this kind of teaching cultivates the imagination, and hence is to be commended, we freely admit; but it often cripples that useful faculty by assigning it tasks which it can not perform. In short, this method demands of the pupil maturity of intellect, width of experience, depth of feeling; and these are conditions found only in mature life.

We see, then, that, however useful the enunciation of discovered truth may sometimes be, it can not form the great part of our work in the public schools. Our pupils are ignorant children, and need to have their knowledge increased, rather than to have their latent knowledge brought to consciousness.

We have two other methods, in which we may seek to do the greater part of our work. If, as a general rule, we can not tell the pupil that a thing is so, because he can not thus take knowledge at second hand, we shall be compelled to produce knowledge by methods similar to those of nature. We may seek to instruct our pupils by direct observation. This brings us to our old battle ground of object lessons. There is no reasonable doubt but that the knowledge derived from observation lies at the foundation of all our knowledge; but there has been a great difference of opinion in our Association as to the practicability of doing this work in the schoolroom. So important a work as observation upon properties of familiar objects should certainly not be left to chance.

That much which has passed for object teaching is idle and fruitless, we all agree; but surely it is worth our while to seriously inquire whether this is not because the instruction is badly given or ill-adapted to the condition of the pupils. If instruction be given upon any object which may be perceived by the senses, it is surely natural and easy to present that object to the pupil, and direct his observations to its properties. If he can not be thus taught, it must be because his mind lacks the necessary preparation for the study of that object.

But all things which the pupil should know are not objects of sense, and it is not possible to present every object of sense before him. It is likely, too, that in our attempts to teach in this way, we have forgotten to make proper use of the imagination. We are so intent on using the eye of the body, that we forget to use the eyes of the mind. For these reasons, we see that the second or objective method is very restricted in its application to school work, and that it has not yet been fully adapted to the practical uses of the schoolroom.

The third or illustrative method of teaching aims at producing knowledge by the use of materials already in the pupil's mind. The objective system is empirical; the illustrative is scientific. The one calls mind to consider an external object; the other, essentially introspective, calls on the mind to turn back and interpret, compare and understand the impressions which have been made upon it. The one enriches us by add-

ing to our stores of ideas; the other utilizes those ideas by using them as the material of thought and means for the discovery of new truth. In this the strictly scientific character of the method is shown. In the exact sciences we begin with a very few perceptions and judgments, which combine for the production of a new judgment, and this, as soon as formed, is added to our stock, to be used in forming new judgments.

It is perhaps the greatest fault of our systems of public instruction, that they fail to cultivate the imagination, and hence we fail to reach the best results. The first or dogmatic method of teaching overtaxes and often discourages the imagination; the second or objective makes but little demand upon this faculty; but true illustrative teaching uses and develops this faculty continually.

It may not be at first apparent that all illustration is an appeal to former observation or experience, or, in other words, a use of the material already on hand.

Suppose we were trying to have our class understand the armadillo, and, calling in the aid of the crayon, we draw a figure of the animal. This is certainly an illustration, and gives the pupil an opportunity of observing the points of similarity between the armadillo and other animals with which he is acquainted. A comparison is made, and the standard of the comparison is some well-known animal, perhaps the tortoise, by which the armadillo is judged and learned.

The subject of general average is very insufficiently treated in our arithmetics. We may tell a story, in which a ship owned by one party, chartered by another, and freighted by different merchants with different kinds of merchandise, being in imminent danger of shipwreck, is saved by the sacrifice of a part of the cargo. We appeal to the sense of justice of the class to state in what manner the losses shall be divided. The illustration appeals to the preëxistent sense of justice in the mind, and evolves the law of the relations of the ship, freight, and cargo. We must certainly admit that all illustrations fail if there be no proper standard of comparison in the mind to which we can appeal.

Dr. Livingstone's companions often asked questions as to the nature of the ship in which he had crossed the great water; for lack of a suitable word in their language, he called it a house on the water; thus using an illustration, the value of which can at once be seen when we remember that all Makalolo houses are round and shaped like a haystack.

The illustrative method is well adapted to the greater part of our public-school work; for every pupil who comes into our hands has acquired by observation and experience a store of knowledge which may be used by the skillful teacher in illustration. The pupil who is taught upon this method becomes by degrees conscious of his powers, and that the essentials of knowledge are in himself. He learns to reflect, and to turn that which he has seen, heard, felt, and thought to use.

But for proof of the utility of illustrative teaching, we appeal not only to philosophy, but also to experience. We have succeeded best in our studies under those teachers who best understood the art of illustration. As teachers we have found it the best and most effective method with

our pupils. We may even assert that the power of illustration is the power of teaching. History shows that aptness of illustration has ever been characteristic of great teachers. One whose themes were the highest, and whose lessons were the most important ever taught to man, availed himself of the most familiar illustrations, as the growth of herbs and the habits of birds and beasts, that he might impress our minds with a sense of trust in our Heavenly Father, and teach us to see that the kingdom of heaven is within ourselves.

DISCUSSION OF MR. WATKINS'S PAPER.

ALEX. FORBES, of Cleveland: If I understand the three different methods of teaching of which Mr. Watkins treats in his paper, they stand in my mind thus: *dogmatic or didactic instruction*, which consists in the enunciation of truths in words to be heard or understood if possible by those to whom they are uttered; *object teaching*, which brings before the pupil the object itself, that he may examine it by means of sight or touch; and *illustrative teaching*, which consists in using an object which may be presented by words, or by pictures, diagrams, or anything whatever which may present the relation of it to other things, or make the subject more clearly understood. If I am right in this, it will be apparent to all that the scope of illustrative teaching is much greater than that of the first or second method named. Because I advocate the last I do not discard the others. I do not say that didactic teaching is never in place. I believe that it is. I do not say that object lessons are never in place, for I believe they have their scope.

All agree that there is too much dependence placed upon the ability of children at an early age to understand words. We attempt to tell them of things before they understand the meaning of the words we use, and they fail to receive the idea existing in our minds and which we intend to convey to them. Our instruction in such cases is wrong, for something more is necessary to convey to the mind of the child that which is in our own mind. We may talk just as long as we please, but no child can gain an idea of the fact that two and two are four clearly without seeing and handling two and two and in some way counting them out. When children pass along much further than this, we depend too much on the description of things and in the proof of propositions, relying upon a supposed knowledge of the use of language which children do not possess. What, then, is necessary in the lower grades, —in the elementary work? I believe nothing will present so brilliant an impression upon the mind of a child as the object itself, where this can be presented. These object lessons certainly have their scope and use. No amount of talk about something that lies outside of the child's observation will give him such an impression as the bringing of the thing itself before him. But, as was said in the paper, this can not always be done. The nearest thing to this that can be done is to place a picture before the child. This is either an object lesson or illustrative teaching, according to the purpose for which it is used. It is not the difference in the use, but the purpose for which it is used. When I use the picture for the purpose of describing the thing itself, it is an object

lesson. If, however, I use it for the purpose of describing or helping the child to understand something else, then it is an illustrative lesson.

If we put into the hands of a German child an English book, illustrated as our school readers now are, he will be able to read much that is in it from the pictures. An English child will do the same with a German book. Every child can read pictures, and will do so when he is unable to read the text. We can teach arithmetic better by using different methods of illustrating the subject. In teaching what is a peck we need not present a picture of a peck measure, but the child will have a better idea of a peck if he sees two half-pecks measured out. A child may think he knows what a bushel is when he learns that four pecks are a bushel, but if he sees four pecks measured out, he has a much better conception of a bushel measure. I may show the relation that quantities sustain to each other by diagrams that will leave in the mind of the child a much more correct idea of such relations than can be conveyed by words. A better knowledge of a sentence may be obtained from an illustrative diagram, showing the relation of different parts of the sentence to each other, than can be obtained without some such aid. All this is illustrative teaching. How little can be known of the subject of botany without illustrations. Take up the subject when flowers can be used to show the similarity or differences of the parts of one kind and those of another, and you gain a much clearer idea than you could obtain without the objects. I believe every school should be furnished with a reasonable amount of apparatus and objects for the purpose of illustrating the subjects taught. I believe in pictures not merely for their general influence on the minds of children, but for the general purpose of description. Where these things are not furnished by township boards of education, it is the duty of the schoolmaster to provide them himself. A carpenter will hardly seek work without tools, and the schoolmaster has no business to enter a schoolhouse without having tools of some kind.

E. E. White, of Columbus: I am very glad that the paper just read presents so clearly the difference between what may be termed an object lesson and an illustrative lesson. Several years ago I objected to the use of the term object teaching as including illustrative teaching—not an uncommon error. One who is regarded as authority on this subject once quoted in my hearing the illustrative teaching of our Saviour respecting the paying of tribute, in which He used a penny, as an object lesson. A clear understanding of the difference between object teaching and illustrative teaching will greatly assist, I think, in determining the proper function and limit of object lessons in school courses. I am also much pleased with the paper generally, but with all due deference and kindness to its author I am constrained to ask, Is the philosophy on which it is based, sound? If it is, then it seems to me that much of the best teaching of past centuries must be condemned as useless. Is it true that knowledge can not be communicated by words? If all knowledge must be developed in the consciousness of the child from the elements there, if there can be no such thing as direct communication of

knowledge, then the didactic method must be ruled out as useless, if I understand it. I am sure that nine-tenths of all I pretend to know, has been communicated to me through words. All I know of past history I have thus received. All I know of the late German and French war, of the continents and countries which lie beyond my observation, and of literature, has been received and directly communicated by words, either by the speaker or writer. It may be replied that this is not knowledge. But this is simply quibbling on a term.

I am not prepared to accept as a sound principle the statement that knowledge can not be communicated in words. It is true that the elements of a knowledge of external nature must be derived through observation. The primary ideas of the properties of matter can not be communicated. They must be gained by observation; but the knowledge expressed by combining their ideas, so to speak, may be communicated when these elements are in the mind. You may communicate a knowledge of Greenland to me, but I must have an idea of cold and heat, light and darkness, etc.

I am not prepared to say that there is no place for the didactic method in school instruction. I think it is a valuable and necessary method. We need to use all of the methods named—the objective, the illustrative, and the didactic, and each in its place. I will go farther, and say, in the strongest term, that there is a place, and an important one, for *authoritative* teaching. The child must receive much knowledge relying simply on its confidence in the teacher. Our acceptance or rejection of revealed truth must depend much on this principle. If there is no possibility of a direct communication of knowledge, and its acceptance on authority, what becomes of the evidences of Christianity and the validity of the Scriptures? This principle will make very serious work with much of human knowledge as well as human faith. I have heard this statement before, both in the National Association and in our State Association, and it seems to me to be a very fatal error.

Agassiz has been quoted largely as opposed to the taking of knowledge at second hand. But what does Mr. Geo. B. Emerson, the naturalist, say of Agassiz's method of study. He says that Agassiz first read all that had been recorded by other investigators and theorists, and then, in the light of that knowledge, he turned to the direct study of nature. That was his method of investigating the subject of evolution, and from others he drew much of the material for his last paper—the one in reply to Darwin. Now if Agassiz was dependent on communicated knowledge in his study of nature, putting faith in the statement of other investigators, what shall be said of the children in our public schools? Must they take no knowledge at second hand? Must they take nothing on authority, and discard every truth taught in a didactic or authoritative manner? I think not. I believe that a true method of teaching conjoins these different methods into one harmonious and beautiful system. We have had too much didactic teaching; we want more objective teaching and more illustrative teaching, but there will be a place in the future, as in the past, for didactic teaching.

President FAIRCHILD, of Oberlin: I did not think of taking up the time of the Association, as I prefer to listen, and I have listened with very great satisfaction. I desire, however, to express my approval of the views just presented by Mr. White. I suppose that every teacher knows that all these methods of instruction must be employed; that he can not rule out any one of them. Every teacher actually employs all of these methods, if he teaches successfully. Perhaps he does not discriminate between authoritative teaching, illustrative teaching, or teaching by objects, yet he necessarily employs them all; and when the discrimination is made, as has been made here, he recognizes them all. I think the didactic method of teaching is, after all, in accordance with the idea the paper presented—the making up of our consciousness, the using of the material for knowing, or the means of knowing, in our own minds. We read the Sermon on the Mount, and it is said that, when the Great Teacher came down from the mountain, the people were astonished at his doctrine, because he taught as one having *authority*, and not as the scribes. We look over the sermon, and we see that it is largely composed of truths which we recognize to be true. The moment they are stated to us we accept them as true. Yet it may be that very few of his audience had thought of these things, had ever put them in the shape presented on that occasion, and the authority of the occasion was chiefly due to the presentation of the truth and such a presentation as made self-evident to those to whom it was presented. And that is a very important field of instruction at present, waking up the minds of the pupils to the comprehension of things to which they need to have their attention called. If I state, for example, a proposition in geometry to the pupil, he can not accept it on my authority, not so, at least, as that it shall have any special value to himself. He may receive it as true on my authority, and might hold it ever afterward; but until he receives it for himself as a matter that he has himself fathomed, he has not reached the truth, or the truth has not reached him. To a great extent this is a principle of didactic teaching—getting pupils in a way that they may accept for themselves facts they see to be true.

There is a teaching by authority of a different kind. We must have facts communicated to us. It is important that we should have truths revealed to us by a higher authority than our own, and such as we may not be able to verify by any principles in our own mind. This is unquestionably true of historic truth, but in most of our scientific studies as mathematics, out of the range of natural science, our minds must grasp the truth as seen by ourselves. It would be a difficult matter, for example, to employ object teaching or illustration to present the truth of a mathematical problem, particularly what it involves, what it is. There is nothing like it in heaven above or in the earth beneath. It stands by itself. One must know its truth in his own consciousness—in fact, must see it himself. So it is in many of our intellectual operations. The pupil must see and feel that the fact he learns, is true. While illustrative teaching or object lessons might not be employed in such a field, there are many fields of instruction where they can be advantageously employed.

Mr. White alluded to the fact that the truth of revelation seemed to turn upon this question of philosophy as to the manner of communicating knowledge. I think he is right. The possibility of a book of revelation, it is said, is a question, and sometimes the possibility is denied. I suppose no one now would question the fact that truths which we need to understand, may be brought to our comprehension by direct revelation, and that this is a part of the object of divine communication to man. And yet when we come to read the Scriptures, there is this remarkable fact that the great body of truths in the Scriptures is of a nature that we understand it ourselves, and we accept it as truth on its own evidence, because we see it is true. And yet the revelation is not amiss, because it awakens up our minds to these facts, and doctrines and truths that we should not have known had they not been communicated to us.

President TAYLOR, of Wooster University: There is one fact in illustrative teaching, in connection with other methods of teaching, which I think necessary to be guarded against, and which should be discussed. I refer to the danger which attends illustrative teaching, which is proportionate to the value of the illustrative method. The mind of youth grasps single ideas mainly; it is not educated enough to embrace the relations of things. Hence, in any use of illustration, the danger is that the precise point which is intended to be brought out, should fail and some other point be reached. Present some illustration to a child, and the child may not receive the idea intended by the teacher. While the teacher has all the time one idea in his mind; the child has a different idea. We see this difficulty running through all the discussions on this subject. It is because of the great difference of the views upon it. Take that illustrative description of the Saviour where he said, "This is my body"—speaking of it as bread. The church has split upon the precise meaning of that very expression. One takes it to be literal, another as wholly figurative, with views intervening. The precise idea that is intended to be conveyed in the illustration to the mind is not received. I was once visiting a house where there was a Frenchman who had come to this country to learn to speak English. He was a very bright, learned man, and was visiting the farm house endeavoring to pick up all the knowledge he could of the language. On the day to which I refer, a load of hay passed by the door. It had been sprinkling. The proprietor of the farm, looking at the hay, said, "That hay is rather green." The Frenchman said, "Yes, it is rather green." A few days afterward a young gentleman came to the house to visit a young lady. The Frenchman, on being introduced to the young man, noticing that he had been sprinkled on by the rain, remarked to him, "My friend, you look rather green." [Laughter.] The young man thinking he had not fully understood him, asked him to repeat it. The Frenchman, having no doubt he was correct in the use of the language, said, "I say you are very green." Upon the repetition of this language, the young man became somewhat indignant, and there was likely to be some difficulty, when the man of the house appeared and prevented it. It seems to me that in teaching it is necessary that the teacher should examine very carefully to see that he is understood, and that his pupils obtain the ex

act force of the illustration he uses. The illustrative method is attended by very many difficulties, and hence it is necessary that great care be employed in the use of it.

Hon. W. D. HENKLE, of Salem: Doctor Taylor has presented an idea, and I merely rise for the purpose of giving an illustration. He has spoken of the danger of misconceiving the true idea in the use of illustrations. Some years ago Rev. Mr. Ashmore, missionary to China, who was tarrying awhile in this country, administered the rite of immersion in the village of Lebanon. A son or grandson of Tom Corwin had been present, and Mr. Ashmore was anxious to see what effect that illustration had upon the boy. He said to him, "Son, were you down to the water yesterday?" "Yes, sir," replied the boy. "Well, what did you see?" The boy replied, "I saw you go in swimming with a woman." [Laughter.]

JOHN HANCOCK, of Cincinnati: I would like to hear from the author of the paper again. I think Mr. White misunderstands him on one point. I would like to hear him again with reference to dogmatic or didactic teaching.

Mr. WATKINS: I have been discussing in my mind whether I ought to speak. But I give it as my opinion, that it is a mistake for me to try to read anything before this Association, or any other, and that it is something I shall with pleasure not repeat hereafter. The fact that my poor performance has been misunderstood by Mr. White, is a good illustration to show how hard it is to communicate anything with words. [Laughter.] Now I meant the whole of that paper as an argument. I first began with knowledge. I tried to show what would be the fruit of knowledge. This I showed was skill,—the skill of the eye, or ear, or hand, or mind,—but always the fruit by which knowledge was known. I intimated that possibly there might be another source for it, but that source, if there be such a source, was not of practical advantage to us. That there may be innate ideas in the mind, Mr. Hancock and I used to think there is. Now I begin to think not. Then I advanced the idea that follows, that, if knowledge be based upon experience, that knowledge could not be transferred. I meant that plainly. I want to be understood now, as I meant to be understood, that the knowledge we daily receive is not directly communicated from mind to mind, and I am ready to be proved wrong if it can be done. Very likely I am repeating what I have stated, but that is exactly where I stand now. Then I expressed the doubt whether didactic teaching could be practical if it be true, at the same time, that knowledge is not communicative. But it seems to me that Mr. White misunderstands me, or has a very vague idea of what I said.

Mr. WHITE: I would be sorry to misrepresent the speaker, but I must say that I can not see that he has bettered things. [Laughter.] I endeavored to state the view taken by the gentleman, precisely as he now states it. I do not say that it is an error, but it is certainly so fundamental that it deserves very careful consideration. If it be true, I can not understand how we know any thing of history. If Mr. Watkins can show

me how we know anything of historical facts,—how we know that there was such a person as Napoleon, and that he was upon the throne of France, that he is dead, etc.,—how we know any fact of that kind, it may enable me to see that I am wrong. If this can not be done, I do not see that I have misunderstood or misrepresented the view expressed in the paper.

Mr. Mendenhall reported, for the committee, that the Superintendents' Association asked to be received as a branch or section of the Teachers' Association, and that it only remained for the Teachers' Association by its act to perfect the arrangements that had been agreed upon.

On motion the report was accepted and adopted, and the Superintendents' Association was received in the manner proposed.

The Association adjourned till 8 o'clock, P.M.

Evening Session.

The Association was called to order by the vice-president, Supt. W. S. Wood, of Findlay.

Hon. H. A. M. HENDERSON, State Superintendent of Public Instruction of Kentucky, delivered an address on "True and False Female Education." The following abstract is copied from the *Toledo Blade:*

TRUE AND FALSE FEMALE EDUCATION.

Education is not the mere crowding of the memory with facts or principles, but the drawing out and disciplining of the powers for the appreciative perception and assimilative appropriation of truth. Education is something different from information. Information is that which one knows. Education is the capacity to know, direct, and employ to useful ends. Information is included in a systematical training—just as a smaller circle may be drawn within a larger one. The *educo* and the *instruo* are two hemispheres which, when brought together, round out the perfect globe of a symmetrical culture. An accurate thinker is an educated mind, whether trained to its office within college walls or in tangled wildernesses. One who can think, analyze the complex and generalize details, marshal the faculties into serried and armed battalions of disciplined force, and march them, like the Macedonian phalanx, on the entrenchments of ignorance, each step making an advance, and every advance making an opening before it, is the cultivated mind. Many young ladies plume themselves upon the number of books they have read, not knowing that much reading, without corresponding thought, enervates the mind, superinduces a morbid habit, and furnishes an apology for the intellect to remain as inert as a honey comb while an author's reflections are poured into the empty cells.

The great Robinson said: "There are but few young ladies that have not read more books than I have, and, as for religious books, I could count them over on my fingers in five minutes, but *they are mine.*" It is not what we read, but what we retain and assimilate that profits us. An untrained mind is a mere sieve, and gathers nothing from the great sea of literature. The educated mind is measurably made independent of books. It has been taught to think—to search out the thought of God in the great creation. It finds itself attuned to the harmonies of the universe, and every leaf of the forest becomes a lyre, and all the varied voices of nature sound orchestral chimes upon the ear. It hears the sound of the Lord's footsteps at even as the breeze whispers amid the trees of the garden, and as the morning sun flushes the dewy air, a benediction seems to fall from on high over the waking world. To it the lily still wears the beautiful dress with which the great teacher clothed it, and every bird that carols its hymn in the hedge sings a trust-song to the soul. It is such a mind that

> "Finds tongues in trees; books in the murmuring brooks;
> Sermons in stones, and good in everything."

The illustration of the proposition that education puts a mind into hearty sympathy with Nature, and thus protects from the pains of solitude, the *ennui* of ignorance, and the dissipation produced by the poverty of intellectual resources, was fully and transparently made by the speaker. He then proceeded to remark, in substance, that such an education as he had described, given to a woman, would, at home, whether in the nursery or the drawing-room, enable her to commune with inspiriting suggestions, and realize that Paradise may be restored in the breast. What woman, entranced with her own pleasing thoughts, would care to leave this self-created Eden to mingle in a company of heartless, brainless gossips? Education decorates everything, and is a more beautiful ornament of the home than the most elaborate upholstery.

The prime defect of modern female education consisted in the ignoring of the great domestic arts of woman's life. Housekeeping and its incidental duties constitute a great business. The woman who conducted it well, deserved as much credit as the man who succeeds in the mechanical arts, in trade, or in the learned professions. Education is power over one's self. Its fundamental idea is discipline. It gives equanimity of temper and a just sense of precision. These qualities are supremely needed in the home. They make a well-ordered household. They put to rout the idle frets and cares of domestic life. They give organizing and directing powers to control servants, discipline children, practice economy, and to provide the physical and æsthetical conditions of domestic comfort. The nursery, the table, the garden,—all will show the beneficial product of the cultured housewife's oversight.

The speaker said he did not contend that the chief end of our wives and daughters was to roast potatoes and cook bread, but he did mean to say that the chief end of their being could never be attained unless they knew how to do this. They might thrum on a piano forever, and draw caricatures of art upon Bristol board, but these partial, parlor accom-

plishments could never atone for burned biscuits and scorched steak at the breakfast table. The poetry of life is well enough, and woman should have much of it, but the tuneful wires dance out of sight when the dinner bell rings. We may be very transcendental in disposition and take gossamer wings and soar into ærial spheres and dwell amid the light of the higher stars; but this unreasoning appetite will periodically return, and neither grammars nor rhetorics nor the graces will satisfy its impatient hunger. The German will leave off his discussions of the everlasting *yea* and *nay*, his reveries amid the mysteries of cloudland, to discuss the merits of *lager* beer and *switzer kase*,—and we are quite as materialistic as the Teuton. The happiness and prosperity of the family—the rudimental human institution—the cell from which national life is developed—is largely dependent upon the *cuisine* of the kitchen. The fashionable school taught a few accomplishments that dazzle, a few serious studies that put them on the road to learning, but nothing to fit for woman's real life, the inevitable duties they must perform as the wife and the mother. The common school, developed to such efficiency as to furnish the kind of education desired, enables parents to keep the girls at home and the mother to train her daughters for the business of good housekeeping in its practical arts. Every female school that takes the girls from under the tuition of the mother, should have a professor of the culinary art as well as a professor of music.

The fashionable schools proposed to feather the pupils for the parlor triumphs and *fetes* of life. He did not condemn accomplishments. Wherever there was a recognizable talent for any one of them, he would encourage it by cultivation. He did mean to demur to the common method of condemning whole generations of girls to one unvarying round of frivolous accomplishments. A method that made mere butterflies to sport amid the fragrance and blossoms of life's garden, with mere gilded dust upon the wings, which ignored the immortality of mind, and did not recognize duty, responsibility, culture, as related to an eternal state of being, is not the kind of education which recognizes the dignity of the deathless intellect, or ought to receive the encouragement of the good, or can be blessed with the approval of Almighty God.

He entered a strong protest against making music the basis of education. Music was the crown, the flower of the arts, but to make it the foundation of education was senseless and decidedly dangerous. But few music pupils can ever learn to play skillfully. It was most often abandoned soon after leaving school, or, at least, after getting married. The greatest embarrassment he had ever known in life was to be compelled to stand by some blundering miss at the piano forte, turn over sheet music, and be put upon his ingenuity to tell a flattering lie when the tortured instrument ceased to complain of its bad treatment. Music is a science, and when properly taught can be made an educating element as much as mathematics. When taught it should be with a view of training the mentality of the pupil as well as imparting a pleasing art. The ordinary way was to teach the girl a few pieces. He could see no difference between the automatic performer at the piano and the

music box on the mantle piece. Neither play with mental power. Both are mechanical harmonies.

The Western nations all demanding the presence of woman in society, it was of high importance that she should be taught to converse well—conversation being the enchanting feature of social life. Education gives affluence of ideas, gorgeousness of imagery, and copiousness of illustration. We had to know well concerning that upon which we talked. Fractional ideas always broke down. Thought must be unitized.

After paying a eulogy to the conversational power of the educated and refined woman, he proceeded to say that if what has been said be in any measure true, we perceive how false and feeble have been the common methods of female education. Things have been stuck on for show—like the chignon on the head. They are like the confectioner's cake, which, though beautifully iced, the figured embossing covered up a deal of badly mixed and badly baked dough. The modern belle has been taught to paint, and her pictures bear about the same relation to true art that the Saracen's head on a village tavern sign does to Raphael's Transfiguration. She has been taught French, and a native Parisian could better understand the dialect of a frog than her few sentences memorized from Telemaque. She has been taught the ornamental branches, and her tatting and tattling keep good company in society. She can crochet and croak, transpose a few sentences of poetry to the admiration of some brainless fop, and talk a few flippancies she has managed to remember from the fourth reader. She has been taught music, and her attempts to play would give a piano the tooth-ache. There is, absolutely, nothing so corroding to its ivory as her blundering touch. She wakes the sense of harmony to revolt—makes you feel that the drum of your ear, with muffled tones, is beating the dead march of music.

We live in an age when we have but few children. We have infants "puling in their nurses' arms", but the next we see of them they are little men, dressed with all the art of the draper's most showy skill, whose chief occupation seems to be to demonstrate to the public how expertly they can twirl a rattan cane from the little finger to the thumb and from the thumb to the little finger. And little women trigged out in frizzles and panniers, bent into interrogation marks, dawdling the Grecian bend, eating up fans and chewing spruce gum as if ruminata, coquetting with little men that can swagger and swear, drink whisky, and reel and rot—trifling mistletoes that can never grow to be grand old oaks. It would be disgusting, if it were not amusing, to see one of these little young old men leaning up against a piano forte to hear one of these little young old women taxing a bad voice to slander music, the little young old woman tossing her head and switching her borrowed curls as she pipes out—

> "I know not, I care not if guilt 's in thy heart,
> I know that I love thee whatever thou art."

Our girls are poorly educated; but our boys will never find it out. And such shams as these we call educated young ladies, when all they

can show to prove it is a parchment that would have done better service in raising a fleece upon a sheep's back than in pulling the wool over deluded parents' eyes.

Observe this *finished* young lady more closely. She talks in the language of the most extravagant hyperbole, indifferent to sobriety and sense; she is in constant quest of admirers, and counts life by the number of ball-room conquests; distrustful of the glow of native charms and inner beauty, she bedizens her face with paint, she pinches her waist with stays as if anxious to crowd what little heart she has out of her mouth; she despises cookery books and delights in Madame Demorest; she piles burdens upon her mother, as if she were a camel to be loaded; having no taste for solid reading, she fills her mind with the painted and poisonous confections of idealism and fiction; she is replete with mawkish sentimentality and bankrupt of all interest in realism; she weeps over some imaginary heroine, and has no tear to shed for her wan and wasted seamstress, who sits beneath the smoked rafters and the dripping roof of her garret chamber, sewing until every finger-joint aches in an agony of despair—making a shroud for herself as she makes the *trousseau* for the bride; she simpers at church and pines when the minister makes the family a visit, but has balcony talk for her Romeo by moonlight and romantic dreams of escapades from cruel parents; she thinks the New York *Ledger* is a charming paper, and her church paper a good thing for patterns,—in short, this milliner's manakin is the veriest sham when put in contrast with every portraiture which reason draws of an educated American woman. Think ye that Wordsworth had such a one in the vision of his muse, when he sang—

> "The reason firm, the temperate will,
> Endurance, foresight, strength, and skill;
> A perfect woman, nobly planned,
> To warn, to comfort, and command."

These are systems of education framed to make women false—fashionable schools where parlor ornaments are made as taxidermists stuff birds for museums. Foreign professors, with no conception of American life, are employed in them, social lotus-eaters, who narcotize their pupils with mental opiates, and send thought and feeling out in question of a Utopia more unreal than that of More's. Signors, Messieurs, Madames, are the catchwords of their catalogues. When you can build palaces out of stones quarried from the rainbow, then you may expect a symmetrical education at the hands of such *diletantes*. If we would have our "daughters as corner stones, polished after the similitude of a palace", send them to institutions where such productions as Longfellow's "Psalm of Life" have a wide and noble reading, where the teacher sees God's image in the soul of the pupil, and worthy of being in its two fold relations to time and eternity, are measured in balances squared by the standards of God.

He would not attempt to detail a curriculum for female education. He would say, let nothing be left out under the mistaken idea that woman's mind is incompetent to the conquest of the abstruse. Let her brain be

recognized as a living organ to be developed, and not as a mere congerie of cells to be filled with the distilled water of flowers.

Men had just as well admit the fact that woman is the intellectual equal of man, though her retired life does not afford her the opportunity to put it on gairish exhibition. The Somervilles, De Staels, Mitfords, Sigourneys, and hundreds of other women whose names breathe breezy memories through the mind, put at an abashed distance the old platitude that woman is the equal of man in the affections, but his inferior in the intellections. The first is true, and the second is a mean attempt to lessen the value of the truth. It is said that among the heavenly hierarchies the seraphim (angels of love) rank higher than the cherubim (angels of light). Taking into account woman's intuitive power, her keen sense of the beautiful, her capacity in the department of ethical and æsthetical literature, and their cognates in the realm of art, far exceeds that of man.

In the intuitions of her mind, in her aspirations for the pure, in the loves of her heart, she is a sybil—a prophetess. She sees what and where the dull sight of man can not penetrate. She glances down the colonnade of the future, and, with a prophetic eye, beholds the procession of events that march with stately tread on to the stage of time. She pierces through matter into the world of spirits, and comprehends much of the unrevealed. She loves flowers as the alphabet of the angels and stars, as the forget-me-nots of Heaven. She has a wing for a lofty flight, and cuts an empyrean of experience which the pinion of man never ruffles. She is a lyre of ampler range than man—she has octaves of sweetness incomparably above him—upon whose chords the fingers of angels may play the airs of Heaven. Classic Sappho, Corinna, Zenobia, Elizabeth, Lady Lumley, Joan of Arc, suggest her power. She has rivaled the laureled sons of the muse, the sceptered of empire, and disputed the palm with statesmen, scientists, theologians, and warriors. Let the advantages accorded Elizabeth Carter and Madame Dacier be afforded all women, and instances of woman's capacity will multiply to such an extent as to put forever out of the field of controversy the question of woman's intellectual equality. The education of woman should fit her to enter into her field of toil and to achieve her mission. This she does when she organizes the home, dries the tear of sorrow, plumes the wing of the soaring heart, and gives to the world and trains to the best uses men who shall reinforce patriotism and religion—men who shall stand up in the pride of conscious worth, feeling that they are clothed with the insignia of nobility, and who shall say as memories of mother, wife, and daughter float over the mind—

> "Be it ever so humble,
> There 's no place like home."

The lecture closed with a brilliant eulogy upon woman, which could no more be reported than a shower of meteors can be photographed successfully.

On motion of Col. D. F. De Wolf, of Toledo, a vote of thanks

was unanimously tendered Mr. Henderson for his address. The Association then adjourned.

Thursday, July 2—Morning Session.

The Association was called to order by President De Wolf at 9½ o'clock A.M.

The opening prayer was made by President A. B. Hinsdale, of Hiram College.

President JAMES H. FAIRCHILD, of Oberlin, was introduced, and delivered the Annual Address, which was as follows:

PERSONAL POWER OF THE TEACHER.

MR. PRESIDENT AND FELLOW TEACHERS: The teacher in the midst of his pupils, sometimes seems to himself far removed from the centres of influence and power. The great world moves on around with comparatively little thought of him or of his work; and on that world he seems to make no appreciable impression. The powers that govern the state, and regulate society, and sustain the great movements among men, take no note of him, unless it be to hedge him in, and restrict his freedom of action, by laws in the enactment of which he has had no voice,—perhaps not the poor privilege of giving one of ten thousand votes to determine who shall be the makers of these laws. All these forces are beyond his reach, and yet they seem to overshadow the world, to mould all human interests, and even to shape his own life and action. Government, in its various spheres of operation, is a recognized power, and the man whose hand is upon this vast mechanism, adjusting or regulating its movements, seems to control directly the greatest of human forces.

Social forces, too, as distinguished from governmental, are seen to be potent in their sphere. The pulpit, the platform, and the press, and commerce with its multipled agencies, are recognized powers in the world, and seem to accomplish whatever remains when government has completed its work. Nay, we sometimes suspect that government is but the exponent of these social forces, and works not independently, but under their direction. But somewhere in this undivided realm of government and society we are wont to find the powers that rule the world.

The teacher, in his quiet, hidden work, hardly counts himself in with these controlling forces. His work seems necessary indeed. It supplies a condition without which all other forces would be inoperative,—as oil is necessary to the movement of machinery, or light to all human work and achievement; but the oil and light are mere inert conditions and not original powers.

It may not, in general, be important that the teacher should have any other view of his work than this. Faithful effort will tell, in the absence of all consciousness of its bearing and significance; but if at any time there is danger that we weary of our work because it seems insignificant, or fail to make reasonable preparation for it because we do not appreciate its value, then we may find needed inspiration in higher and juster views.

A clearer apprehension reveals the fact that all valuable work takes effect, at length, upon personal character; and all the great movements of the world, which impress us by their magnitude, are to be tested, at last, by their outcome in well-being. That is the potent force, which yields the most abundant result in human virtue and happiness. Tested by this standard, the movements which seem so vast and significant, must yield in importance to some far humbler in pretensions, but which bear more directly upon human character and destiny. If one post of duty or of influence is more responsible than others, it is that which involves direct personal contact with the thoughts and the lives of men. Such a post the teacher occupies, and for such purposes and results his pupils are placed under his hand,—that, too, at the most impressible period of their lives, the period when they are forming the principles which shall control them, and shaping their character for the coming years.

Children and youth are born hero-worshipers, and fathers and mothers and teachers are their natural heroes. In after years they may awake to the fact that the wisdom which impressed them was very limited, and that what seemed to them perfection of character was very incomplete; but this early impressibility gives to the teacher a great opportunity. More than this, it imposes on him a high duty. He must accept the position, and justify the pupil's generous confidence.

We sometimes encounter a theory of the teacher's work, which makes little account of this personal relation of teacher and pupil. The teacher is supposed to have met the claim upon him when he has imparted to the pupil a definite amount of geography, grammar, and arithmetic, and other technical knowledge, and is not to be held responsible for any action upon the character of the pupil. Indeed, all such action is supposed to be beyond his jurisdiction,—as unauthorized and illegitimate. To confine him within his proper limits, here and there a board of education excludes the Bible from the school, and interdicts all religious instruction and observances.

Such a theory would be most preposterous, even if it were practicable. How unnatural and even monstrous that teachers, to whom is intrusted the shaping of the thought and mind of the child and youth six hours a day for a term of twelve to twenty years, should be forbidden the privilege, or excused from the duty of any action upon the character of the child. It would be only a little greater extravagance to maintain that the mother should not prepossess the mind of her child with any principles of life, or any views of truth and duty, but leave him with an unbiased judgment to determine all these matters for himself when he shall have reached maturity. Might not a plea be made, on the ground of individual and personal rights, for such a system of parental neutrality? How otherwise can the privilege be secured to each man of determining his own position on the great questions of morality and religion? Shall we not have a law, forthwith, excluding the Bible from the household, and limiting parental responsibility to the simple business of determining for children what they shall eat, what they shall drink, and wherewithal they shall be clothed?

You will pardon this *reductio ad absurdum* of the extreme doctrine of individualism and personal rights, as exhibited in our day. The truth is, men are born children, and kept children during a period of twenty years, for the purpose of having their characters formed and their principles for life settled under proper guidance, and parents and teachers are the heaven-appointed guides of childhood and of youth. It was, perhaps, impossible that men should grow in any other way.

But if such a relation of teacher and pupil were desirable, it is utterly impracticable. Place a teacher of a primary school in the midst of her pupils, their young minds just opening to the facts and the problems of life, and how is she to avoid moulding their thoughts and their lives? She may speak or be silent, the work goes on all the same. The plate in the camera is not more sensitive to light from surrounding objects than these young souls to every word or gesture, or smile or frown of their teacher. How considerate to shut out the Bible and the prayer, and send in the law and the gospel and a whole ritual of worship incarnate in the patient and wise and loving woman, in whose thought and life they live as in the air and sunlight! Forbid her, if you will, to utter a word of religion or duty. From the very atmosphere around her, they will take in religion and duty as their vital health, and, under her gentle guidance, they will enter upon those paths of life which they will follow to the end.

The power of such a teacher over her pupils is something marvelous. I knew a boy many years ago, who picked up from the floor a single crinkled hair that had fallen from his teacher's golden tresses, and kept it in his book for weeks, a secret treasure. Men in mature life, with the responsibilites of manhood upon them, still name with reverent love the names of the lady teachers of their childhood.

This privilege of personal influence is by no means confined to the primary teacher. It extends through all the grades of the pupil's progress; and is the birthright of every teacher. It is inseparable from the work itself. It is impossible that one should walk daily in the midst of young minds, traversing with them fields of thought and inquiry which are new to them, and ever fresh to him, without, consciously or unconsciously, taking them with him in lines of thought in which he delights, thus imparting to them his own principles and shaping their opinions by his own,—and that, too, not merely in matters of technical knowledge, but in practical questions of life and duty. It is this privilege and responsibility of personal influence which constitutes the great attraction of the teacher's vocation. It is this which elevates it entirely above the plain of mercenary pursuits, and makes it a beneficent ministry. The money consideration involved is the least of all the motives to enter upon the work. As in every pursuit, the money is helpful and necessary, but the interest which gathers about the personal relations of the teacher with his pupils, is a far higher attraction. We are told that Socrates, the great teacher of Athens, refused compensation for his instructions. He claimed that the regard and love of his pupils was a sufficient recompense. Such ideas are too transcendental for our utilitarian age, but every successful and worthy teacher can, at least, under-

stand this view of the old philosopher. He takes the salary that he may teach, but does not teach for the salary. The work is too exalted to be measured by commercial standards.

In this higher range of the teacher's work, the element of power is his own *personal character*,—what he is in his own purpose and thought and life. It is a power difficult to analyze and set forth in any logical statement. We can speak of things that contribute to it and of other things that hinder; but the subtle force itself, which the successful teacher carries with him like his own personality, and which never ceases to operate, it is difficult to define. We see its beneficent working, but can scarce tell whence it comes or whither it goes.

The grand basis of this power is unquestionably *genuineness of character*,—that simple human excellence which is the foundation of self-respect, and of the respect of others. We may call it integrity or honesty or moral uprightness or goodness, it is always the same thing,—the foundation of all high character. Of itself it is a power, and always commands the respect of men. It is the one thing in which all men believe and must believe. The character in which this is present, is never a failure whatever else may be wanting, and where this is wanting, there is always disappointment whatever else may be present. Such genuineness of character is its own justification and demonstration. The teacher stands in the midst of his pupils, subject to their observation and criticism, for days and weeks and months and years. There may be times when they will misjudge his motives and his character; but, on the whole and in the end, they will recognize genuine goodness and honesty and honor, and they can not withhold their respect. No mere appearance will serve the purpose—no circumspectness of demeanor. There is no successful seeming without the being. The squirrel is not surer to know the sound nut, than are children to recognize instinctively genuineness of character in their teacher. There may be teachers that succeed measurably in running the machinery of the school though lacking this crowning quality of human excellence; but they must fail of the higher power which it is the teacher's privilege to employ; and, however great their strength in other respects, their influence must always rest upon an uncertain foundation. Moral distrust of a teacher, on the part of his pupils, will sadly mar all his work.

Next to this fundamental quality, I should place a *genuine sympathy with human nature*. An appreciation of its interest and its worth,—not a conviction of its value in the gross, but a hearty interest in individual human beings. It is a law of spritual mechanics, as well as of material, that action and reaction are equal. The interest of the pupil in the teacher will be measured by the teacher's attraction towards his pupil; and to be interested in the pupil, the teacher must have such a breadth of human nature in himself that he can appreciate every variety of character. It is not difficult to be drawn towards the naturally amiable and graceful and winning; and every school furnishes examples of this kind. Such natural beauty of character draws at once upon the teacher's heart, and the danger is, that he will let the light of his countenance fall upon the places where that beauty blooms, and leave all beside in

darkness. The teacher must understand that, under a forbidding exterior, there may be real worth,—that many a rough stone reveals its value only in the cutting. Sympathy even with stupidity is not an unattainable grace, and it may be the only force which can waken that lethargy into life and movement.

In teaching, more than in most other forms of work, we need what one writer has called the *enthusiasm of humanity*. The teacher must find his own satisfaction and life in his interest in the ever-varying specimens of human nature which fall under his hand and in their waking up to the truths he imparts. In that channel his genius must run. We sometimes make the mistake of assuming that the chief qualification for teaching is a permanent interest in the branches to be taught,—that an enthusiastic linguist will, of course, be an enthusiastic teacher of language, and a natural mathematican, a successful teacher of mathematics. The result often disappoints us. The great interest of the teacher must always pertain to his pupil, and the interest in the science taught may be secondary. The teacher should never be tempted to turn away from his teaching for the sake of a favorite study. His teaching is to be his favorite study; and this, after all, is putting things in their natural order. The highest earthly science in dignity and importance is the science of humanity. We make no complaint when one devotes his life to the study of mollusks or mushrooms. We call him an enthusiast in science, and rejoice over him as an honor to the race. But as long as a man is better than an oyster, or a toadstool, there is higher reason for our interest in mankind; and this is the field of the teacher's enthusiasm.

His interest, too, must be specific, and not general. It is not enough that he looks upon his pupils as detached fragments of the mass of human nature,—duplicate specimens of the same formation. He must be able to differentiate, to detect variations, to individualize his pupils in his regard. They must be known to him as Jane and Mary and William and John, not merely as members in the different forms of his room. Personal interest alone can give personal power.

In regard to the susceptibility of interest in individual character and life, men, and women too, are quite differently constituted. To some this interest is quite natural and easy. The born teacher has it constitutionally, and adds to it by culture and growth. There may be those to whom such interest is almost impossible. They weary of contact with their kind, and, while wishing mankind no harm, they seek for themselves other society, and thoughts of other things. Such a man was Thoreau, the recluse, the lover of nature, whose chosen paths lay far from the haunts of men. Such a man was not Agassiz, the "Teacher", who loved not nature less, but mankind more. Against such natural prepossessions it is difficult to struggle; and one may properly retire from the teacher's calling who finds in himself no witness to his vocation in a perennial interest in the young spirits that gather about him.

Prominent among the traits which contribute to personal power, we may place a *clear discernment of the situation*, an instinct of the true relations of things, a sense of the proprieties and improprieties, in every emergency.

I call this an instinct because it is to be distinguished from the logical faculty to reason out the case, and settle in a judicial way the delicate questions involved. There are cases arising in the experience of a teacher, where deliberation and delay are possible and proper. The element of time involved is an advantage; but there are countless other cases where the decision must be as instantaneous as the flashing of an eye, and imparted to the pupils only by such a flash, with almost utter unconsciousness on the part of the teacher and even of the pupils that such a decision has been made or communicated. This gift belongs naturally to women rather than to men, and is one source of their special personal power. By some magnetic connection, the teacher's sense of propriety is communicated to the pupil, and controls the common thought and action,—a result attained not by any direct criticism expressed in words, but by the personal sense of the teacher taking effect in the consciousness of the pupils. The judgment which controls them seems to be their own, and at length becomes their own.

There is an impressive lesson in the sight of a quiet little woman seated at her desk, and controlling, without any effort or demonstration, fifty restless spirits, that find their pleasure in moving as she wills. This special gift is sometimes called authority, or the power to govern. But there is little consciousness of government on either side. The teacher is in the midst of her friends, who delight to meet her pleasure. There is no subjection or constraint. It is sometimes called will-power; but will-power implies conscious effort on one side and repression on the other. Power of will is essential to the teacher, and is brought to bear upon the willful and the wayward; but it is too strenuous an exercise for a constant dependence,—burdensome to teacher and pupil. The more probable explanation is, that the sensitive nature of the teacher, responding instinctively to every visible movement, and appreciated by every pupil, operates as a regulative force for all. In the presence of such a teacher, the perception of the proprieties on the part of pupils is quickened and elevated. Doubtless many forces combine to the result, but prominent among them must stand this delicacy of nature and feeling on the part of the teacher.

Thus it is that what we sometimes count as weakness shows itself as strength. Extreme delicacy and sensitiveness of nervous organization we often regard as a misfortune, and we are apt to pity a teacher thus endowed. But under proper conditions, and well sustained by other forces, it may prove her strength and protection. The keen sense takes hold of other natures, and controls them all. The rudest crowd feels the power of a cultured woman's presence, and the ribald jest that would have moved their laughter, becomes intolerable and loathsome. Thus it is that teachers of the highest culture and refinement are most successful, even in schools of the crudest material. Without reflection we might select for such a school a teacher well endowed with muscular vigor and rude strength, reserving the more sensitive nature and the higher culture for what seems to us the higher work. This is questionable wisdom. Delicacy of nature is not lost upon the most uncultivated. They need just such a civilizing force.

The same delicacy, unsupported by the sentiment of humanity, becomes *fastidiousness*,—a weakness instead of a strength. It is a repulsive force between teacher and pupil. The teacher repelled from his pupils by such a sentiment, must retire from the field. No genius can bridge the chasm. Nor can a keen intellectual apprehension of conditions, of proprieties and improprieties, take the place of the finer instinct. Such an apprehension makes the critic, and leads to sharp and caustic and reiterated correction of the apprehended impropriety. Such criticism irritates, but does not elevate or help. The pupil becomes hardened and indifferent to the criticism that wounds his self-respect, when a kindly glance that suggested the wrong would have corrected and won him.

Most mischievous of all are sarcastic words that sting where they touch, and leave often a permament wound. There is a temptation to use such words on the part of a teacher who has a keen discernment of improprieties, and the gift to set them forth in cutting phrase. It seems for the moment a genuine power. The thrust strikes home, and the pupil writhes in pain. The work seems effective, but bitterness and hatred follow. Those of us who were taught in country schools, forty-five or fifty years ago, can remember that a thoughtless boy would sometimes be brought to himself by a crash from the master's ruler that was hurled across the room and struck over his head or under his feet, and sometimes between these two points,—or, if the ruler were not at hand, the penknife, perhaps with a blade open, took its place. The offender was expected to show his sense of the favor intended by returning the missile to the master. This, at the present day, would be called rough manners for the schoolroom; but I have sometimes thought that the hurling of sharp and stinging words about the room is scarcely less objectionable. The wound is deeper, and does not heal satisfactorily.

Sarcasm has its uses in the world, but it is doubtful whether it is ever called for between teacher and pupil. Indeed, in the ordinary relations of society, the sharp-tongued critic is allowed a wide berth even among friends. I have known, here and there, a brilliant young woman, richly endowed with social gifts, left to stand alone in society, because her friends and admirers had learned wisdom from experience. Plain and kindly reproof involves no such danger; even scolding is less mischievous, though it is almost surely fatal to the power of a teacher.

To make even the highest personal gifts available, the teacher must have entire *self-possession* or *self-control*,—a somewhat difficult attainment to a nature keenly alive to all surroundings, as that of the successful teacher must be. Self-control, however, does not imply that the teacher is to betray no emotion, no approval or disapproval, no sense of impropriety, no indignation when the occasion calls. Such manifestations are essential to personal power. A stock or stone in the schoolroom would serve no purpose. The danger to be avoided is such an expression of feeling as the sober second thought will not sustain. A thoughtful teacher reviews in his own mind every instance of condemnation or rebuke, sometimes with a painful apprehension that the expression was more severe than the occasion called for, that it was based on some misapprehension, or that some mitigating circumstance was overlooked. It

is of the highest consequence that he should have the confidence of his pupils for fairness and justice,—a reasonableness almost as unfailing as the order of nature. There is, comparatively, little difficulty in meeting this demand, except where perturbation of feeling comes in and leads to hasty judgment and expression. Indignation or resentment is the chief source of the danger, but the teacher needs this element in his constitution as really as the more amiable graces. But, like fire or water, it is most useful when kept well in hand. It is not necessary that indignation should burst forth in words, to serve its best uses. It may work more effectively without any utterance. Emerson once said that a thought expressed in words would often lose half its power. This principle applies with even more force to the feelings. The expression may exhaust the feeling and produce a reaction. Kept in reserve, it will vitalize and intensify all the activities. The teacher can well take time to let his judgment rally before uttering his indignation in rebuke. The outburst may be less overwhelming, but it will be directed by a better wisdom. The little demon of irritability or impatience in the teacher, is altogether another sort of spirit, and must be cast out even by prayer and fasting,—or by rest and recreation, if such measures are more effective. It is an intolerable clog upon the personal power of the teacher.

But with every precaution the wisest teacher will sometimes fail in self-possession, or reprove unjustly by mistake. Whatever may be due to the pupil in such a case, the teacher owes it to himself and to his influence with the school, to acknowledge the mistake, and recall the reproof as openly as it was given. There is no doctrine of infallibility upon which teachers can fall back. Pupils have no faith in such a doctrine; nor can we flatter ourselves that they will not discover the injustice. The nearest approach we can make to a reputation for infallibility, is in setting right a wrong that has been done. We can not wisely comfort ourselves with the thought that the offender has often deserved rebuke which he has not received, and that compensation is in the order of nature and providence. Such a philosophy might help the pupil in his submission to the injustice, but it will not restore his confidence in the teacher.

The same principle of *acknowledging an error* extends to matters of *science* and *instruction*, as well as of discipline. It is desirable that the teacher should have a reputation for thorough scholarship, for accuracy of learning, especially in his own department of instruction; but the reputation is not to be acquired by ignoring his own blunders, or leaving them uncorrected in the hope that pupils will not discover them. Such correction is necessary to true honesty and honor, as well as to proper instruction; and children understand this as well as trained moralists. Conscientiousness in every performance is the condition of the hearty respect of pupils.

The bearing of *sound scholarship* and *real learning*, upon the personal influence of the teacher, is too obvious to require mention. It is because he has such material to impart, that he occupies the place of

teacher. If he fails here, however good his heart or his intentions may be, he can claim no toleration in the work. He has strayed from his proper sphere.

But in the minute subdivision of the departments of instruction, which prevails in our day, the learning which the teacher seems to need for direct use, is comparatively easy to attain. If we must accept the reports of county examiners and superintendents, there are still marvelous deficiencies in this direction; but no one dreams of success in the calling without these necessary acquisitions. It is not so much this necessary equipment with the material of instruction, to which I now call attention, as that wider culture which gives general intelligence and adds to personal power. The teacher should not be content with that knowledge which lies directly in the line of his teaching, but should try to add whatever will tend to enrich the mind, to enlarge the nature, and broaden the foundation for respect and confidence. The teacher who asks the respect of pupils, must present in himself something worthy. Scanty knowledge and superficial thought will constantly betray itself, and the combined forces of a score or two of pupils will soon bring it out. It is necessary that, when they sound the depths of the teacher's understanding, they should not strike bottom every time. There should be a richness of thought, and a fullness of knowledge which they can appreciate but can not compass. Thus it is that every branch of knowledge, in the range of science or of literature naturally contributes to the teacher's power. It is a great mistake to confine his studies to the branches he is to teach. Everything which will contribute to his general culture, and his breadth of view will be a help and support in his work.

One of the dangers to which we are exposed, in the thorough subdivision of the work of instruction, is that we narrow our range of thought and study, giving exclusive attention to the single branch or department assigned us, and thus become specialists, acute and informed in a definite line, but deficient in general and comprehensive culture. The field of thought and investigation has become so vast that, to advance its boundaries, there must be specialists, men who will push forward, each in his own chosen path. But such culture is not what fits the teacher for his work. It is not what brings out human nature in symmetrical fullness. A teacher can not afford to be a specialist. A group of specialists in a board of instruction will not supplement each other's deficiencies, and give a full and symmetrical culture to their pupils. The tendency will be to divide their pupils among themselves according to their different tastes and tendencies, and reproduce according to their kind. The work of teaching requires symmetrical manhood and womanhood, because the most important and effective part of the work is wrought indirectly by the personal influence of the teacher.

Allow me to raise the question, in passing, whether we do not stand face to face with a danger now threatening our higher schools of learning. In the aim to secure the highest style of instruction, there is a tendency to fill each chair with one who, in that line of study, has shown special ability in investigation, or has made some contribution to human

knowledge. What else he knows or fails to know is hardly brought into the question. He may lack that breadth of thought which is necessary for the best and safest impression—may not be competent to put his own science into its true position in the circle of sciences. To his own thought, it does not stand in its true relations. Is there a reasonable prospect that the resultant of these unadjusted and conflicting forces in the university will be the self-consistent and symmetrical culture essential to true manhood? The danger may not be pressing, but the fact should never be lost sight of that the most wholesome teaching comes from the fullest and broadest culture.

In the work of elementary teaching, no such high demand can be realized, but the aim of every teacher should be to add to his acquisitions and enlarge his field of thought.

The mistake of *seeming* to know instead of knowing, will be made only by superficial natures. All such seeming in the teacher defeats its own aim. It is not necessary to make a show of learning. Such an effort betrays weakness. An abundance of utterance is not called for. Overmuch talk is a hindrance and not a help. It is well that the pupil should be impressed with the fact that the teacher has not told all he knows. Reserved force is by no means wasted force. A great display of wisdom is sometimes depressing to the pupil. The contrast of such wealth with his own poverty, is painful and oppressive. It would be wiser to bring out the treasures sparingly. I remember two friends of my youth, young men of force and promise, with whom I occasionally passed an hour. From the visit with one I always returned to my room with a profound sense of his ability, and of my own comparative insignificance. The other had the tact to bring out whatever was in myself apparently to his own satisfaction, and certainly to mine. From that day to this these two have stood to me as representatives of different types of teachers. A pupil may sometimes need to have his conceit reduced by an overpowering impression of the ability of his teacher, quite as often he needs to be saved from any painful contrast, and encouraged by his teacher's appreciation of what is in him. No teacher can know too much; but only rarely, if ever, should he overwhelm his pupil with his knowledge.

Skill in organization and general discipline is an essential element in a teacher's personal possessions. The best intentions and abundant gifts are often rendered nugatory by the want of this power. To be able to manipulate a school, with a wise adjustment of all its parts and movements, so as to prevent friction and disorder, is a peculiar gift or acquisition not within the reach of all, yet a teacher can not succeed without a fair measure of this power. High character, abundant learning, and all other graces combined will avail little without administrative ability. The school is a mechanism and the teacher is the engineer. He must comprehend his machine or it will run away with him, or escape from his control. The school can not manage itself. Its only unity lies in the consciousness of the teacher. He is the organizing force. There are doubtless principles that have permanent value, and methods of arrangement that are better than others; but it is difficult to say that any sys-

tem, in all its detail, is absolutely best. That is relatively best through which the teacher's personal power can work most effectively. Every successful teacher succeeds in his own proper character. He must act himself, or he can not act well. It is not an infrequent mistake for young teachers to take on the methods and measures of older teachers whom they admire. The danger is that these methods will not be at all adapted to their nature or their experience. Young David was wiser when he laid aside Saul's armor and retained his sling and the five smooth stones from the brook. In later years he doubtless girded on the armor of the warrior. Would it not be in harmony with this idea to adopt certain elementary principles of organization and discipline, and leave a margin for the operation of each teacher's special tastes and gifts, to afford greater freedom of personal movement? True, the system of schools would be less perfect as a mechanism. It would be more difficult to give a report of the schools in the form of tabulated statistics, or to compare one school with another as to numerical results. So an orphan asylum is much better systematized than an ordinary family, and we express our admiration by saying that it moves like clock-work, still the ordinary family is better than the orphan asylum for bringing up children. We fall back upon the orphan asylum when the family breaks up. But you can get statistics from the orphan asylum—not very satisfactory ones from the family.

Do not understand me as undervaluing organization and system in schools. I only ask that organization should be kept in its place—made subordinate to the essential welfare of the scholar, and to the personal influence of the teacher. We should never forget that it is not in itself an end. The machine is not constructed for the sake of its own beautiful movement, nor for the sake of registering accurately how many revolutions its different wheels make in a given period. If I mistake not, I have sometimes fallen in with a teacher working in a thoroughly organized system of city schools, who had consciously or unconsciously accepted the work of turning the crank at which she had been stationed for the sake of grinding out averages and percentages for the report to the superintendent. A stronger teacher in the same situation would not have succumbed to the machinery. She would have taken possession of it as the instrument of her power, and vitalized every portion of it with her own personality. The spirit of the living creature would have been in the wheels. But, unless I am misinformed, some of the most successful teachers in our state prefer to drop the complex arrangements of the system and work their schools by a simpler method, the outgrowth of their own taste and judgment and experience. How far such freedom of arrangement can be safely indulged, is a practical question to be settled by experiment. The higher the character of the teachers, the more elastic the organization might be. The highest style of teaching will be secured, when teachers shall be competent to shape the school greatly after their own thought, so that the details of arrangement shall be the outgrowth of their own personal character, and adapted to their own uses. This view may be rather ideal than practical, but ideals may be entertained for what they are worth.

Once more, a character combining the various elements set forth, integrity, humanity, true discernment of proprieties and relations, and self-control, will add the crowning spiritual grace—*a sense of things unseen*—will be truly and profoundly religious. I use the term in no narrow or sectarian sense, but as implying that recognition of the Father of Spirits, which our human weakness and dependence calls for—that thought of God and of his rights and claims, which moderates human passion and inspires and sustains all human excellence. The teacher's resources of personal influence and power are utterly inadequate, except as he draws from this ever-living fountain. The religious element is too potent in human nature to be left out of account in the close relationships and the common interests of teacher and pupils. Children are constitutionally religious, and the great majority have the religious sentiment more or less developed by education. It is a forced and unnatural condition, I might say an impossible one, to pass in utter silence the great facts to which the religious nature corresponds. It would be a grave neglect in our systems of education to make no provision for this great want, and a grave loss to make no appeal to the religious sentiment in bringing to bear upon the young the forces which are to shape the character and life. For teachers and pupils to read together such portions of the Scriptures as set forth the elementary duties and facts of religion, and to express their common want in prayer, would seem most natural and most helpful; and it does not seem too much to hope that we shall at length come generally to accept so much of religious observance, as appropriate to the public school, called for alike by Catholic and Protestant and Jew. But no restriction can rule out the beneficent power of religious truth working in the character and life of the teacher. His consciousness of God and respect for his will must necessarily diffuse itself, and thus all that is valuable in this personal influence will be reinforced and sustained and exalted.

These, fellow teachers, and such as these, are the forces at our control in the work we are called to do. To use these forces, and to do well the work, requires self-denial and consecration. No work enlists more fully all the powers, or makes larger demands upon the energies and life, or brings richer returns in present satisfaction and in final result.

Mr. JOHN HANCOCK, of Cincinnati, then read the following paper on—

THE HIGH SCHOOL QUESTION.

All the indications are, that the question of state education is to be again re-argued. The causes that have led to this unsettled condition of the public mind, time does not permit me to consider. It is sufficient to say, in passing, that perhaps in no period of the world's history has there been such a questioning of old beliefs, such a wild chaotic drifting of opinion upon all the subjects ranging themselves under the category of the so-called science of sociology.

The enemies of state education may be divided into two general classes: (1) Those who do not believe it to be the province of the state to edu-

cate at all; and (2) those who, while admitting it to be the duty of the state to educate its citizens, would confine that education within very narrow limits.

As against the first class,—though the refutation of its theory does not fall specifically within the scope of my present subject,—I trust I may be pardoned for reproducing, in a somewhat modified form, the line of reasoning presented on another occasion, and with which some of you are doubtless already familiar.

The rehabilitation of the old skeleton, called the police theory of the powers of government, and the attempt to introduce it as a controlling element into the management of the complex civil affairs of a great and enlightened nation, as though it were a living force, might well call forth the derision of all men capable of even the most simple efforts of thought, were not such an attempt likely to be followed by serious consequences.

What, then, is a state; and what are its functions? A state is a political community or nation. The machinery by which this community accomplishes the purposes of its organization is called its government. This government rightly exists, whatever may have been its origin, or whatever may be its form, only for the benefit of the citizens of the state. Perhaps no better definition of its general functions can be given than that it is to promote the greatest good to the greatest number. And it is certain there is no fixed form of government which shall always best secure this end. On the contrary, the best forms of government for different peoples will vary with the varying circumstances of those peoples. One can readily imagine that the best form of government for a rude and savage tribe, would be that of a despotic chief, whose absolute power alone would be sufficient to band the repellent elements together, the unifying force of one will overcoming the divergent forces of many wills. It has, indeed, often been found necessary with people of high intelligence and the most liberal forms of government, in times of great internal commotion or of threatening dangers from without, to concentrate all the powers of the government in the hands of a single individual.

For a state more advanced in civilization than the rude tribe just supposed, but the masses of whose people are yet ignorant, the best form of government is undoubtedly the one whose powers are wielded by the most intelligent citizens only. A monarchy of limited powers is the most common of these forms.

But all the forms of government which are either wholly or in part despotic, are, as I hold, but preparatory to that highest and best form of government wherein every citizen has a voice—a form which presupposes for its permanency a general diffusion and large variety of knowledge. When we reflect how complicated and knotted is the web of the thousand interests which cross and recross each other in every possible direction in a great nation of modern civilization, with its pursuits of agriculture, commerce, and manufactures, and the yet higher ones of knowledge and culture, no fiber of which web can be touched without affecting all the others, we are forced to the conclusion that none but

the most cultured peoples are capable of the management of the affairs of state.

I have thus attempted to show that there is no absolute, abstract form of government which is best, and which may be applied to a state, whatever the circumstances of that state, with the certainty that it will promote its welfare better than any other form. It seems to me that no one who is willing to learn, either from history or philosophy, can fail to see that the form of government which is best fitted to the wants of any people will always depend upon the condition of that people. In other words, governments have their various stages of development, leading up from that of the independent marauding chief to the most liberal democracy. If this is true, how little weight should attach to the opinions or statesmanship of him who attempts to lay down, *ex cathedra*, one form of government for every people. How much less, then, should his opinions weigh who attempts in the same *ex cathedra* manner, to determine the special functions of the state. And yet men to be respected for their learning and motives have done both. It only shows, however, how strong are the influences of the traditions of party or of a philosophic sect. Says one of our own distinguished citizens on this point, with a courageous plainness new to most of the present generation: "It [the state] is a contrivance to protect us in our persons and property, and keep the peace by police regulations. That is all." "The state is an organization for a definite, limited object, and does not endeavor by any agency peculiarly its own to make a man good or happy." "The state is a preventive, compulsory remedy—a remedy of force—using the scaffold, chain, and prison houses in order to prevent crime and preserve peace and quiet." "It is a proper and needed contrivance to keep one man off another, suffering him while he is passive, to mock at religion, trample upon morality, and indulge all manner of evil dispositions. It does not reform; it does not eradicate evil—it merely restrains it." To express his idea in different words: the state is absolutely indifferent as to whether virtue or vice shall triumph. It can apply no motive to prevent a man's becoming a murderer, except the fear of the hanging it threatens for the slaying of his fellow. It can do nothing to teach men honesty; it can only provide the prison house for the thief. According to this theory, instead of being a beneficent institution for the promotion of the happiness of the community, by leading its members into the ways of wisdom, the state is a dreadful ogre, whose sole office it is to hunt down and devour criminals.

Now I venture the assertion—and appeal to history for its confirmation—that no civilized state was ever conducted on such a basis; neither is it possible that it should be. Such a notion of a state might be entertained with consistency by a Ghengis Khan or a King of Dahomey, but our thousands of years of civilization have availed us little if we have advanced in our theory of government no further than this.

We may ask those who hold this police theory of government, without discourtesy we trust, where they find the exact limitations of the powers of the state, which they lay down with so much confidence? Are their broad lines found in nature, in philosophy, or in history?

They are found in none of them, and, for the very good reason, there are no such lines. This theoretical scheme of the state is spun out of the brain of its advocates—and how wild and absurd such theorizing statesmanship may become, is well exemplified in the speculations of the father of the positive philosophy and some of his followers.

But are there, then, no limitations of the powers of the state? There certainly are. But where those limitations shall be found will depend, as has been said, upon the condition of its people. It may be stated, in general terms, that the state should allow the largest liberty to the citizen consistent with the highest general welfare of the community. This broad freedom for the citizen is based on the principle that a community—setting aside differences of natural advantages—will be strong, prosperous, and happy, in exact proportion to the intellectual and moral development of the individuals composing it, and that this development is impossible without freedom. That the freedom of the individual should be thus restricted is on the principle that, where there is any conflict of interests, the rights of the one must give way to the rights of the many.

How, then, shall we ascertain that nice adjustment of means by which the rights of the individual and the highest welfare of the state shall be brought into a just equilibrium? Most assuredly not by glittering abstract generalities, having no other foundation than the traditional prejudices or the fertility of the imagination of him who utters them. It can only be found by a careful study of the history of nations, and by applying the experience thus gathered, in the light of a true philosophy, to the peculiar circumstances of each political community.

The doctrine that the state is a mere contrivance to keep one man off another, and that all its powers are merely of police, has, then, its warrant nowhere, either in the domain of history or philosophy. The state is not restricted to the use of the scaffold, chain, and prison houses in order to prevent crime and preserve peace and quiet. Humanity and the spirit of the age cry out against such a doctrine. The state does just what the opponents of a public-school system say it has no right to do. It institutes means to train the intellect and moral perceptions of its citizens. It does not stand by in utter helplessness until the man has become a thief, and then seize and thrust him into prison, but its energies are directed to train him to respect the rights of property and become an honest man. It does not wait until the assassin has plunged the knife into his victim's heart, and then attempt to remedy what is irremediable by taking the criminal's life in turn, but strives to educate him in the great moral law that permits no murder. And, in general, its aim is to prevent crime rather than to punish it.

To assert that the state is divested of all rightful power to carry out this humane object, would be a monstrous solecism. It is true that after having exhausted all legitimate efforts to prevent crime, the state may be compelled to resort to the scaffold, the chain, and prison houses for the protection of the persons and property of its citizens, and the preservation of peace and quiet; but it will be only as a last resort, and not a preferred one. To chain a thief by the leg or shut him up in prison to protect property, or to punish a homicide by imprisonment or hang-

ing to protect the persons of the members of society, or to preserve the public peace and quiet by the constable's club, are coarse and vulgar means of obtaining a desirable end, and not more coarse and vulgar than partial and ineffective. Such means savages use more effectively than civilized men. The state that relies upon them alone, no difference what its form of government, is destined to speedy ruin.

The moral forces are those most constant and sure in their operations on society; and they are the forces upon which every well-ordered state must chiefly rely. The generation and direction of these forces it dare not, if it so desires, leave to chance or the caprice of its citizens. Every good and stable government presupposes intelligent and moral government; and the greater the intelligence and the higher the morality, the better and more stable the government. But in a state wherein the whole people participate in the government, the demand for a general diffusion of intelligence and morality is most imperative, since the elements of disintegration are vastly augmented by the increased number of conflicting individual interests, which become through the ballot active factors in civil affairs.

If my argument thus far is a logical one, then the theory that education is not one of the functions of the state, falls to the earth, being based on nothing but dogmatic assertion.

But those who boldly assume the responsibility that logically follows from their theory of the function and powers of the state, are not the most dangerous foes to our public school system: these foes are they who would kill it out at the top; they who, while acknowledging the right of the state to educate, still hold that this education should be confined to the merest rudiments of learning. These foes to an efficient system of public education—most of them honest in their convictions I doubt not—are too often found, I am sorry to say, among the most intelligent of our citizens, even among educators who deservedly stand high in their profession. An attack upon higher public instruction has, within a year, been made all along the line. The war opened at the last meeting of the National Educational Association, and from there, taken up by the press, has been pushed into almost all the states of the Union. And it is particularly discouraging to the friends of the best possible education for the whole people, to find a force that does so much to form and control public opinion, arrayed with such singular unanimity upon the wrong side.

According to the principles just established, the question of how much a state shall educate, is dependent, as are the limitations of its powers, upon its circumstances. A wealthy state or community should educate more than a poor one. Not that an extended education is not just as valuable and necessary to the latter as to the former, but because the poor community has not the means to secure it. A great and wealthy city can well afford to support a system of high schools with a curriculum of studies as extended as was that of most American colleges a few years since, and, in addition, to build up for the benefit of its citizens a great free university; and her highest interests, both moral and material, demand that she should do so. Smaller and less wealthy

towns can afford to go no further than the high school, while country districts will be compelled, as a general thing, to content themselves with that extent of learning comprehended in a good grammar school course. But even in the case of these last, there is no absolute line at which we can say, "Thus far and no farther." No; far distant be the time when nothing shall be taught in the country schools beyond reading, writing, arithmetic, grammar and geography. It is too true that a little learning *is* a dangerous thing, if it lead its possessor to be content with his meager portion. No soul ever grew to generous proportions on such slender provender. To make the country schools the living, energizing force they are capable of becoming, they must have in them a higher element—a thought-awaking element—that the branches named can not give. Though I can not speak with certainty on the point, I fear the country schools are degenerating in this respect. Those I am well acquainted with, seem to me to be growing, year by year, more entirely into the narrow mould of the grammar school course.

My memory turns back with pleasure to the little country district of my boyhood's home. In it no such short-sighted policy prevailed. Among the youth of the simple-minded people of this district existed a divine hunger for knowledge, created by what influence I know not, unless it was the little library of wisely selected and well read books that had an abiding place among us. Our elders, though not learned, were possessed of an excellent common sense—possibly the result of a diligent study of the books of the little library. Our school directors did not hunt around for the cheapest teachers, but made diligent search for the wisest ones; and when they had found them, instead of setting them adrift at the end of the first quarter, they kept them for years,—giving them the warmest places by their firesides in winter, and a warm corner in their hearts at all times. Under these teachers we studied algebra, geometry, trigonometry, surveying, and natural philosophy; and some even made a respectable start in Latin. Now when it is known there was not a parent in the district of sufficient wealth to send even one child away to school, the conclusion is inevitable that if we had not obtained a knowledge of these branches at home, this knowledge never would have been obtained anywhere. I can not say how many of my companions, with no higher education than the district school gave them, went out into the conflict of life's arena, and fought their way up to honorable and useful positions; but I can say, that the spirit of high endeavor there engendered has not gone without its reward. The education thus gained, crude and imperfect as it was, was the result of healthy, vigorous work, and has, with most, since grown into the more symmetrical proportions of definite knowledge and generous culture. It may be claimed that the district to which I refer was an exceptional one. Perhaps it was. And yet I can not doubt there have been thousands of young men who can date their intellectual awakening and after success in life to the pursuit of the higher branches in their district school.

I am behind no one in the advocacy of township and village high schools; but I must insist that where the population is too sparse for

these, the farmer's boy shall have a chance at the higher education in in his home school.

One of the leading arguments urged against the higher public education is its expense. It involves, say its opponents, a burden of taxation too intolerable to be much longer borne. This was almost the sole reason brought forward by the friends of the effort to cut off the people of Ohio from the advantages of instruction higher than the elementary ones, made in our late constitutional convention—an effort which resulted in a most ignominious failure, as it deserved to do; for such an effort would have stamped an indelible stigma upon Ohio and placed her below the meanest carpet-bagger state in the Union. It is true we are borne down by taxes, but it is not our school taxes that are most severely felt, and all radical retrenchment in that direction will but add to the load. Our civil service, state and national, is a most miserable failure. The money collected from the people to carry on the government is not so much stolen by dishonest officials as it is squandered by incompetent ones. There is, perhaps, no civilized country in the world where so much public money is wasted through ignorance. In the early days of the government the employment of ignorant men to manage public affairs may have been a necessity; it now seems to have become a virtue. Have we not as members of congress of one of the most powerful of nations, men without pretense of learning and culture of any sort; nay, men who glory even in their rude uncouthness. And yet they are expected to legislate upon some of the most difficult problems that can tax the acutest powers of the best trained intellects.

The display of power by Germany in her late war with France has excited the marvel of the world. And this power has been looked upon as the result of the general training of the German people in her public schools, her compulsory laws for school attendance giving a knowledge of the primary branches a very wide diffusion. But if we examine the subject thoughtfully, important as the influence of this general training must be acknowledged to be, we shall find, I think, another more powerful and recondite cause operating as a factor, and that is the influence of the higher education which permeates every department of government service. There the gymnasium and the university is brought, so to speak, to every man's door. Earnest, energetic, crafty brains are at work in original investigation in every department of human knowledge. Learning is honored everywhere, and there is no other door that opens into the higher vocations of life. There it is an honor to hold a public office, for offices are held by cultivated men—offices and officers reflecting mutual honor upon each other. But Germany is not exceptional in this matter. Old and effete China (as we are pleased to term her) is a thousand times wiser than we in this respect. She, too, makes education an unvarying condition to employment in public affairs. But when we attempt by a civil commission to ascertain whether candidates for the lower grades of our public service (we have never had the temerity to attempt any thing of the sort in respect to the higher grades) possess any qualifications for the positions to which they aspire, the procedure is sneered at as a humbug by both political parties, and

the ignorant "bummer", as usual, comes out ahead. If our government could but be once prevailed upon to declare by a sufficient statutory enactment that it should be possible for no man to thrust himself into a public office, without the education necessary to the proper discharge of its duties, we should have but little need to cry out against taxes, and should save enough from the present waste caused by the incompetency of ignorance to sustain a high school wherever one is needed, and have a handsome sum left over for the establishment of colleges and universities, without taking into the account the moral gain to the community arising from the total destruction of the whole army of professional office-seekers. We may, too, cry out for reform in the management of government affairs in the helpless way we have so long been doing, but unless the people arise in their might and demand a complete revolution in the method of selecting government officers, then is our destruction as a nation not far distant.

Another objection urged against public high schools is, that but a small portion of our youth ever pass through the curriculum of study of a high school course, and thus the few are educated at the expense of the many. This is unfortunately true at the present, and I fear will be true for a long time to come. But does the fact that these schools make a higher education possible to every youth who has the courage to labor and battle for it count for nothing? I dare assert that this opportunity given to the poor to shape themselves to nobler forms of manhood, and the knowledge that the road to such manhood lies open and broad to the self-sacrificing and brave, exerts a moral force to lift up the whole community to a higher plane of thinking and living that will far outweigh the expense.

Besides, an equal chance to all is but justice. We should remember, too, that the best society is constantly recruited from below—from the very gutters often. Deep down in these lower strata lies most excellent material of manhood—tough, strong, and enduring. These barefoot boys, accustomed to hard knocks, self-reliant, battle-waging, when their hearts have once been seized upon by the divine hunger for knowing, grow into giants whose thoughts and words fill the whole earth. Beside them the sons of the rich have but a slim chance in life. Shall, then, the cup of learning be thrust aside from their hungry lips? But it is urged that such as these will get an education, however scant their opportunities, and however great the obstacles that lie in their way, without any public provision for it. It may be so, but some of those who listen to me, know from an experience most bitter, at what a fearful price triumphs over these obstacles are won—at the cost of many of the best years of life, the man of forty having acquired with infinite pain the knowledge that under ordinarily favorable circumstances he should have possessed at twenty.

Let me repeat: justice, the best interests of society, the perpetuity of free institutions all alike demand that the poor boy and girl should have a chance in life. Cousin has well said: "The human soul lives in the future. It is ambitious because it is infinite. Let us then open to it a progressive career, even in the humblest occupations." And if we

are to consider the expense, what investment of money can afford so rich a return? He contributes most to the material wealth of a country, who sets in motion the inventive faculties of its people. The thinking artisan, as Emerson has it, compels all the forces of nature to labor for him. That town or city which is without a public high school, works at a fearful disadvantage in competition with the towns and cities which pursue a more liberal policy. That fine spiritual essence of fiery activity that pervades an intelligent community, is lacking in it. Thoughtful people never move into it. They avoid it as if it were afflicted with the plague—and it is. If the inhabitants of a town wish to board it in, and write "finished" on every wall, let them abolish its institutions of higher learning. Suppose Cincinnati were to abolish her high schools and root out her young university, where would she stand ten years hence, when compared with Cleveland, Chicago, and St. Louis? I think her very name would be almost forgotten.

I am brought to consider another class of objectors—they who profess to fear that the education of youth in high-school studies will leave us nobody to perform manual labor, educated people considering work with the hands a disgrace. I think, however, that it will be found that the respectability of any branch of labor has always depended upon the intelligence and character of the people who performed it. Thirty or forty years ago New England young women of intelligence and from good families worked in cotton factories, and felt it no degradation to do so; but when crowds of ignorant and unrefined foreigners were brought to work by their side, a feeling of justifiable pride drove the Yankee girl from that field of labor. Intelligent workers will make any sort of honest labor respectable. We can not afford to have, we dare not have, an ignorant servile class in our country. A republic must not permit its citizens to settle down into horizontal strata of social caste. When they have done so, the republic will be one in name only. We must not have one kind of education for the poor and another for the rich.

As sustaining this position, I am enabled to quote the words of a gentleman not in our profession, who ranks among our ablest thinkers: "It is said that education creates a distaste for manual labor, and if we keep up the common schools we shall have no laboring class. It was the doctrine of feudalism, it was the doctrines of slavery that you must have a degraded class in order to have a laboring class. But God grant that may never be the doctrine of my country. The history of the last four centuries, if it teaches anything, teaches the gradual enfranchisement and elevation of labor: that as you make men respectable, you make their labor respectable."

I shall be forgiven, I trust, if I again return to the thought that the pressing want of our country and time is, that the higher education should be extended to embrace a much larger number of our people. The educated conscience, the cool judgment that weighs carefully and adjusts means to ends, are what we most need; and such a conscience and judgment are attained in but one way, and that is by a high and thorough mental training. Nothing short of such a training can stay and beat back the mighty tide of demoralization that threatens to over-

whelm our country, both in public and private affairs. Wild and spasmodic schemes of reform are futile winds, creating scarcely a wave on its surface. No moral code can be imposed upon a people; to have force and permanency it must be a growth from within.

But it is objected by the advocates of the police theory of government as opposed to what they are pleased to term the paternal theory, that if it were the proper function of the state to educate its youth to as great an extent as its means will warrant, still it is not good policy for it to undertake the work; for they argue that when any institution of learning is much needed, that need will, in some way, be supplied without the aid of the state, and that it is only by this sort of self-help, that the "noble breed of free and independent American citizens" is to be kept up. This objection, notwithstanding its respectable source, is too puerile for serious refutation. In the first place, it is not true that where institutions of learning are much needed they are always supplied by private munificence. The history of the different states of our own country disproves the assertion most absolutely. In the second place, it is not true that ignorance contributes anything to the number or quality of the noble breed of "free and independent American citizens"—and that ignorance would be the portion of the larger part of them, if they were compelled to rely on private enterprise to furnish schools for their education, is sufficiently established. The fact is the fear of the limitation of the freedom of the individual by the interposition of the state in his education is a sort of superstition. The state, in our form of government, is not some tyrant setting above us, watchful to snatch from us our liberties. On the contrary, it is the work of our own hand., and we can unmake as readily as we made it. It dare play no trick with our freedom. When we shall feel it oppressive at any point, at that very point we shall begin to operate for a change. The true way, then, to perpetuate "the noble breed of free and independent American citizens", is to provide for each such an education as will give the fullest and freest use of all his powers. Then he will grow up such a giant as none will dare attempt to shackle in limb or thought, and withal so valorous and patriotic a citizen as that his country shall never want a defender in her hour of need.

I can not conclude without saying it would be cowardly to shut our eyes to the fact that not our high schools only, but that our whole system of public instruction is surrounded by many perils. Not the least of these perils is the possibility—nay, not the possibility only, but the probability—that the system may be captured by the professional politicians and all its machinery be used for partisan purposes. When the system shall have been dragged through the sewers of party politics, its white garments bespattered by their loathsome defilements, there is imminent danger that the better class of our citizens may be persuaded to turn to some other scheme for getting their children educated. But if our teachers stand firm, never lowering the moral standard of their profession, nor suffering the standard of education for the whole people to be lowered, but advancing it to nobler heights rather, however corrupt may become the administration of affairs in every department of public

life, and however much we may be cast down by temporary defeats, I have confidence that the great public conscience and the public intelligence will in some way get themselves embodied into a working power that will drive party corruptions out of the school system, at least, with the same honest and divine vehemence that drove the money-changers from the temple.

DISCUSSION OF MR. HANCOCK'S PAPER.

Prof. R. H. HOLBROOK, of Lebanon: I rise for the first time before the Ohio Teachers' Association. I do so now with very great deference to the older persons here, who have studied and discussed these subjects. I would not undertake it were not the theme, so ably discussed in the paper, one of considerable interest to me and one to which I have devoted in my small way some attention. I think it was the reading of Spencer's papers in relation to education that roused my doubts with reference to the public-school system of this country, and the effect which they have produced in many minds, young and old, and which theme I was led to look into more carefully, as I was connected with a private institution, and with the view which comes from that side of the question. Being associated with those who love the public institutions of this country, I sympathized deeply with that side of the question, and I undertook a careful personal investigation with reference to the right of the state to educate and the limits that should be set upon the right of the state to educate, supposing it had any power granted it whatever. My first query was with reference to Spencer and his arguments, and on that I settled myself I think pretty well. When I remember that Spencer is an Englishman and I an American, it seems to me there is a difference. Spencer is a subject of a strong government, in which the ruler or rulers gain in strength and power over the ruled by every addition which is made to that power, or every concesssion which is made to it by the people, and in which the people or subjects who are ruled lose in their power by just as much as they surrender. In such governments the state is one thing and the people another thing. But in our country the circumstances are entirely changed. I can not, for the life of me, abstract that sufficiently to give one power to the state and another to the people, in America. I am the state; you are the state. It is not the man in power; it is not the controlling man in the government; and I therefore conclude that whatever advantage may be given here in America to the state as an entity, is given to me as an individual of that state, and so much of it is mine, and looking upon it in that way, I could see no ground for fear as to the state having too much power in this connection. I can not make the distinction between the state and its people, consequently I could see that here, as I believe, it is true that our profession, in its whole work from top to bottom, is in need of original practical investigation. The field is new, and we have in this government of ours just as much to solve with reference to the rights of the government, as we have in this profession of ours to solve in reference to the work that is to be done. It is a question of experiment entirely, a question of practice, and no one can deny it

when in these United States, or in any one state of these United States, it has been proven by practice, by actual experiment, that we can carry on a good school system, an efficient school system economically. When that has been demonstrated, what need have we of further argument? What can Spencer's arguments do with that? What bearing can they have? His logic is clear, but it is very different from what is here. So with that view I thought I would look into our school system, and see whether it did pay, whether it was economical, and about two years ago I undertook the hard, tedious job of taking the state reports of superintendents throughout the United States, examining them carefully, and gettting out of them figures which bear upon this work, which represent expenses, putting them together, and comparing them as far as possible, the reports being such as they are, in a way that the comparison would be fair and reasonable, and in a manner to obtain the most practical solution of the points, and get them out in such a way that the comparison of those results would be fair at least.

The discussion which is likely to take place with regard to statistics at our next National Association, and the discussion which took place at the National Convention at Washington a few months ago, exhibited pretty clearly the difficulty which exists in this matter in preparing statistics of states, in securing material for practical, useful, and reliable conclusions. I hope that our State Superintendent, Mr. Harvey, who is to read a paper or make a report at the next National Association, will throw some light upon this matter, and that such information will produce some results for good. Knowing the difficulties involved in such an investigation, I yet felt willing to begin it and to obtain whatever results I might. I did so. There were many other items, but those relating to the percentage on population, the expense per pupil, and the length of the school year—those three points I thought were the ones that I needed, although I had many other points which I associated with those and carried into my calculations. And in taking the reports of the different superintendents of the country (of course many of the southern states are not reported, but I think all but one northern state, that is, Delaware) and comparing them, I found this average—that is, in these United States the schools were continued year before last six and nine-tenths months, and in those schools nineteen per cent of the population, nearly one-fifth, were enrolled, and each one of those enrolled was educated at an expense of $10.60 per year. I thought that showed our school system was not very expensive at least. I defy any parent to put a pupil in school, private or otherwise,—I defy him to find a school, in which he could keep his child seven months at a cost of $10.60. I think the investigation determined in my mind that our school system over the United States was certainly economical, certainly effective, if it got one-fifth the population into the schools. It is certainly effective from another standpoint. The average attendance on the enrollment throughout the United States was sixty-three per cent. I think that is pretty good. Some of the cities, according to these reports, have an average of ninety-eight, ninety-two, and ninety per cent, but I do not believe very much in them. If a state or city or town re-

ports sixty-five or seventy per cent, I have some faith in it. If they run them up to ninety-eight, I think there is much more in the skill of getting up reports than in getting good attendance. Nineteen per cent of the whole population, not of the enumeration, were enrolled.

Having settled my mind with regard to the public schools generally, I then tried with regard to the matter of expenses of the public high schools. Do they pay? That is generally the argument that is made. The matter of the rights of the state has nothing to do with that question. Is that a good argument? I thought. If we can prove that it is a poor argument it is sufficient. I confined myself to Ohio, and I think rightly, because Ohio stands geographically about the middle in educational matters in the United States. It stands at a good, healthy, creditable average. I went then to Minnesota, and took the extremes, as I thought, for the materials of comparison.

A MEMBER: Did your first statement include the high schools?

MR. HOLBROOK: Certainly. It was not confined to any department, and more than that, in those expenses I did what I have been accused of being wrong in doing. I did not omit any expenses. I put down every cent that has been expended in building or repairing school property of every kind. I put down all the money that has gone from the people. I took the high schools of the whole state of Ohio. Ohio stands well in the matter of fullness and reliability of statistics, a fact known, I suppose, to our lover of statistics, Mr. Henkle, as well as others. From this I was enabled to get what I thought was a fair average of the expenditures in the high schools. I found that throughout the state to educate the pupils in the high schools seven months—for that is the average of the school year (6.9 is more correct)—it cost eighty cents per week. I do not think that is very expensive for a high school education.

QUESTION BY A MEMBER: Is that on the enrollment, or on the attendance?

MR. HOLBROOK: On the enrollment. We have that all the time in this comparison. I took that because it is a figure that I can get. Attendance is a very conflicting sort of item, but the enrollment is not so conflicting, though enough so. I took the average grades, though I do not know that that is necessary; indeed, I do not think it is entirely correct to do so. In the private school with which I am connected we charge a dollar per week, which is very low. Other normal school men thought that was enough, but other private school men say that it is not enough. You could not, I think, get tuition at Cincinnati or any other place at that. So it seems that the result of my figures with the high-school system as existing in this state is that it is very economical. There is no money wasted. It is efficient. It is open. It is free. Consider a moment, friends, the result if our high schools were blotted out. Just think of such a thing! It is perfectly appalling. Now there are opportunities open. When we consider all this, and that it is so cheap, seems to me that there need be no further argument in favor of high

schools. I expect to go further—beyond the high schools. You notice that it gets more expensive as we go higher, as might be expected.

Miss OAKES, of Springfield: All who think upon this subject should understand that the state of sentiment which opposes high schools is just this: It is not the cost of the public high schools, but it is the fact that those who are able to send children to private schools, are obliged to support them. They do not wish to support these public high schools because they do not want to send their children to them. It is a fight, I think, between the rich and the poor. It is so in the town from which I come. There high schools have been voted down once, and I fear will be again. I talked with the gentleman who introduced the resolution, and his argument is this, that the people who can afford to give their children a high-school education, wish to send them somewhere else. If people can not afford to pay for a high-school education for their children, they ought not to have it. If you want a high-school education, pay for it, is the argument. It is high time that the people of the lower class should understand just exactly where the point is. I think I am not mistaken. I know that this is the animus of those who do oppose the high schools. A man ought not to expect somebody else to pay for his education; he must get it himself.

Mr. COOK: The observation of the lady who just spoke may be true in regard to Springfield, that the opposition is on the part of the rich. We have a large opposition on the part of the poor. It has occurred to me that it may arise from the belief that the high schools are chiefly attended by the children of the rich and well-to-do people. My attention was called to that fact by Mr. White. I looked over our roll with the express purpose of looking at that feature of it. I found in our last graduating class of twenty-five, that a large majority of those who graduated could not have obtained a higher education except in a free high school. The parents were not able to give it to them. Girls were obliged to do all the work at home, and, I was going to say, take care of a sick mother besides. Such was the case with one, in daily attendance at the school. The opposition is not entirely on the part of the rich. There is another opposition. The president, I believe, has noticed it. I think he called attention to it in his address on this subject. It is on the part of men who have educated themselves, but have allowed themselves after they have been educated to be drawn into narrow ways, though I blush to say it, through religious sectarian influences, and those persons are crying out for us to stop the high school and to turn the pupils of the grammar schools over to them, and they will educate them. These errors show themselves since the last national convention more than ever before. The question has not been thus far met by those of our educators who should meet it. They have not taken the stand that they ought to take, although educated men and leaders in many of our denominations. We have an element of opposition among the educated classes—educated in a certain sense, though it seems to me in a very narrow sense—and those men are not willing to participate in the upholding of the high schools. They have no logic, but are very much

like the clergyman who was beaten in an argument on baptism. When his arguments were all gone, he said, "I was educated in this belief, and I will stick to it as long as I live, if there is not a particle of logic in it."

W. H. COLE, of Wilmington: It is not that I suppose myself to understand this question better than anybody else, or as well as those who have discussed it, that I rise to make any remarks, but because I happen to be in possession of some facts which may be of some value to the Association to know. There have been objections even in the town schools, of which I have had charge for the past four years, to the high school, and among these objections this is urged, that our high school does not prepare those who go through its course of study to enter our colleges,—that the high-school course is not adapted to the college course, and the college course is not adapted to the high schools. There are gentlemen who support these schools who desire to patronize them, but in their patronage they desire to prepare their boys for entering college. Now, it seems to me, if there were some arrangement made by which the high school and college courses could be adapted to each other, that at least one ground of objection to the high schools would be removed.

There is another argument which has not been offered, and which is, I think, worth being mentioned in this connection, and that is, the opportunity it affords teachers to prepare themselves the better to teach. I know this is true in our country high schools, or high schools in small towns. From the class that we have turned out from our school, I think nearly one-half have entered the work of teaching, and I think they will make the best, or among the best, teachers in our county. Now we can not in Ohio in our normal schools prepare all teachers for work in these schools, and we must look, therefore, to the high schools to supply our teachers with higher qualifications.

In regard to the other matter, the opposition of the religious world, I think, with all due deference to what has been said, that this opposition is worthy of our careful consideration. Does the charge lie against the public schools of Ohio that they are irreligious. If so, we must cleanse ourselves and beautify our work. We certainly do not want these irreligious schools. The discussions of papers that have been read here, breathe another sentiment, and we can not claim for the teachers of Ohio that we want irreligious, godless schools, for the very papers read here in this hall during this association would deny it. If, then, these objections do lie against our high schools and public schools, let us make them better, and in this way remove criticism and opposition.

B. B. HALL, of Republic: There is one point which the gentleman who just sat down mentioned, which I would like to hear further discussed: that is, the relation of the high schools of the state to the colleges. Some of our college men passed a resolution to receive high-school scholars without a knowledge of Greek, to have other things make it up as an equivalent. I would like to hear from some of the college men here as to what have been the results of that movement. What

is the character of the preparation which our pupils get in the high schools to fit them for the college course, and whether it is and has proved to be a profitable one? Their experience, I think, would assist all in that direction.

S. D. BARR, of Cleveland: I do not rise to discuss this question now, because I know all are anxious to go, but I do say from the very bottom of my soul, I hope that we shall not leave this place until we have given this question such a shaking as it never has received in this country, if we can do so. It is a question of infinite importance to us now. I do hope most earnestly it will be taken up this afternoon. I would be willing to stay here a month, if it is necessary, to discuss it.

On motion of I. M. Clemens, of Wooster, the committee on place of next meeting was requested to report at the opening of the afternoon session.

The report of the treasurer was called for by G. A. Carnahan, of Cincinnati. Said report was made by the treasurer, L. S. Thompson, of Sandusky.

On motion of A. B. Johnson, of Avondale, E. E. White, of Columbus, was requested to explain the connection existing between the State Teachers' Association and the OHIO EDUCATIONAL MONTHLY.

On motion of E. T. Tappan, this subject was referred to the committee on resolutions.

On motion of E. H. Cook, of Columbus, the committee on nomination of officers was requested to report. The chairman, R. W. Stevenson of Columbus, reported as follows:

President—A. B. JOHNSON, of Avondale.

Vice Presidents—W. W. Ross, of Fremont, E. E. SPAULDING, of Painesville, Miss D. A. LATHROP, of Cincinnati, A. T. WILES, of Zanesville, J. F. LUKENS, of Portsmouth.

Recording Secretary—G. N. CARRUTHERS, of Chillicothe.

Corresponding Secretary—L. W. DAY, of Cleveland.

Treasurer—L. S. THOMPSON, of Sandusky.

Auditor—J. S. WILSON, of Gallipolis.

Executive Committee—For three years: H. M. PARKER, of Elyria, ALEX. FORBES, of Cleveland. For two years: G. A. CARNAHAN, of Cincinnati, SAMUEL FINDLEY, of Akron. For one year: JOHN OGDEN, of Worthington, H. B. FURNESS, of Tiffin.

Finance Committee—C. W. WILLIAMSON, of Wapakoneta, N. M. MCLAUGHLIN, of McConnelsville, H. BENNETT, of Franklin, J. J. BURNS, of St. Clairsville, J. M. GOODSPEED, of Athens.

The report was adopted.

Adjourned till 2 o'clock, P. M.

Afternoon Session.

The Association convened at 2½ o'clock P.M.

W. D. Henkle, chairman of the committee on place of next meeting, reported that invitations to meet at the following places had been received: Ohio Agricultural and Mechanical College, Newark, and Xenia; and that the place of next meeting be left in the hands of the Executive Committee.

On motion of U. T. Curran, of Sandusky, the report was amended by recommending that the Executive Committee arrange for the next meeting of the Association at Put-in Bay.

The report was then adopted.

Hon. M. B. HOPKINS, State Superintendent of Public Instruction of Indiana, was introduced, and read a paper on "County Supervision in Indiana."*

On motion of John Hancock, of Cincinnati, a recess of five minutes was taken, after which Prof. WALTER SMITH, of Boston, Mass., addressed the Association on "Art Education in Boston."†

G. S. Ormsby, chairman of the committee on resolutions, reported as follows:

1. *Resolved by the Ohio Teachers' Association*, That thanks be tendered to the members of the Executive Committee, and especially to its chairman, Mr. G. A. Carnahan, for the excellent programme prepared, the admirable arrangement of business made, and for efforts, though unavailing, to secure passage to and from the Convention at reduced rates of fare; also to the president and the other officers of the Convention for the efficiency with which they have discharged their several duties.

2. *Resolved*, That thanks be tendered to Miss D. A. Lathrop for the excellent essay which she consented to read; to the Hon. H. A. M. Hen-

* The length of Mr. Hopkins's paper and the large amount of space devoted to the details of the Indiana system induce us to omit its publication. It will appear in full in the September number of the *Indiana School Journal*, with an obituary notice of the author who died August 16th, of congestion of the brain.—EDITOR.

† This address was not written, but Prof. Smith agreed to prepare a copy for publication, if we would furnish him a phonographic report of the greater portion of his remarks. This was done, and the following letter explains the non-appearance of the address:

BOSTON, MASS., *Aug.* 29, 1874.

DEAR SIR: Prof. Smith has been very seriously ill since his visit to Put-in Bay, and is now away from home recruiting, so that the delay in sending his paper has been in a great measure unavoidable. We have been obliged to keep him away from *all* business.

Yours Resp'y,

WILLIAM BRIGGS.

derson and to President James H. Fairchild for the interesting and instructive addresses delivered by them; also to Supt. M. B. Hopkins, of Indiana, for his valuable paper on "County Supervision", and to Walter Smith, of Boston, for his instructive lecture on "Art Education."

3 *Resolved*, That thanks be tendered to the representatives of the press for their full and accurate report of the proceedings of this Convention.

4. *Resolved*, That thanks be tendered to the proprietors of the Put-in Bay, the Beebe, and the Hunker houses for their generous entertainment of the members of the Association at reduced rates.

5. *Resolved*, That the Ohio Teachers' Association commend to all the teachers of the state, its own organ, the OHIO EDUCATIONAL MONTHLY, published by the Hon. E. E. White, as eminently worthy of support, and that the teachers of the state be urged to extend its circulation to the greatest possible extent.

The report was adopted.

The Hon. H. A. M. Henderson, of Kentucky invited this Association to meet with the Kentucky Teachers' Association, at Mammoth Cave, in August, 1875. Mr. Smart, of Indiana, invited the Association to meet with the Indiana Teachers' Association.

On motion of Dr. A. A. E. Taylor, of Wooster, a vote of thanks was given for these invitations.

I. M. Clemens, of Wooster, gave notice that at the next meeting of this Association, he would propose an amendment to the Constitution, making the committee of communication between teachers and those wishing to employ teachers a permanent committee of this Association.

After singing the Doxology, the Benediction was pronounced by Dr. Taylor, and the Association adjourned.

EDITORIAL DEPARTMENT.

—— WE present our readers this month a double number, filled with the proceedings of the Ohio Teachers' Association. The addresses, with the two exceptions specified, are given entire; and the discussions are condensed from phonographic reports. We believe that the proceedings of no other State Association are published with like fullness and accuracy. We specially commend President Fairchild's admirable paper to all our readers. We hope to give next month an interesting report of the proceedings of the National Educational Association at its late meeting in Detroit. It was one of the most important meetings of the Association yet held.

THE

NATIONAL TEACHER:

A MONTHLY EDUCATIONAL JOURNAL.

Vol. IV. OCTOBER, 1874. No. 10.

SPENCER ON EDUCATION AND MORALS.

One may think well of Herbert Spencer without indorsing all that he puts forth in the name of philosophy. In his late chapter on "Mental Science and Sociology", he reiterates his views in opposition to the current ideas of education and the control of educational affairs by the government. He makes two leading points, which may be stated as follows: First, that it is feeling, not "cognition", which produces action; and, secondly, that education by the government relieves the parents of a just responsibility, and must be vitiating both in its immediate consequences and in its later reactions.

I. The example which Mr. Spencer gives to show that action proceeds, not from cognition, but from feeling, certainly does not set aside the moral value of intelligence. No one contends that the feeling of duty is commensurate with the extent of knowledge. With equal intelligence individuals may differ in the force of their impulses. What we believe to be true is, that the sense of duty is more likely to lead to action—and to right action—when associated with intelligence than when it is associated with ignorance. The value of knowledge in relation to action may be best seen in an example involving unequal measures of knowledge. The lout who is sunning himself on the bank, and has not sufficient liveliness of imagination to put himself in place of the struggling man, and who does not reflect how much it is worth to be conscious of a noble action, will not rise to the heroism which the emergency de-

mands. And any way, without the practical knowledge of the art of swimming, it would, in the case supposed, be suicide to venture. So that certain accomplishments, intellectual and physical, are the necessary prerequsites to such moral action. Without the root and stem there can be neither bloom nor fruitage. If action depend on feeling, and if feeling be affected by knowledge, then does knowledge influence action. The connection is none the less complete for an intervening link. When Mr. Spencer affirms that "mere cognition does not affect conduct", he virtually denies that cognition has any effect on feeling from which conduct springs; and this is the main pillar of his argument against the moral worth of intellectual education.

It may be true, as Mr. Spencer says, that there is nothing in the mere rudiments of intellectual education to develop the moral sentiments direct; but the logical error here consists in giving emphasis to a point which is not in dispute. It is not claimed that the rudiments of knowledge are directly moral in their influence on character; but it is claimed that they are the initiatory steps which lead to the manifold avenues of culture. If Mr. Spencer were selecting the soil in which seed sown should take root and grow into moral products, he would select the cultured rather than the uncultured mind. He would expect his own philosophy to fare better with the intelligent than with the unintelligent; and, moreover, he expects his philosophy, which appeals exclusively to the intelligence, to ultimate in results which are moral.

We may add that, in logical acts of the mind, whereby error is detected and truth seized upon, there is involved an unequivocal moral element which adds greatly to the value of character. According to Spencer's Philosophy (Psychology, Vol. I, 478), cognition and feeling take their origin at the same time under the same circumstances, and are throughout but different aspects of the same development. There is no escaping the fact that the moral and intellectual elements of character act and react upon each other, and that out of this mutual influence springs improvement. This is the very reason why despots and sectaries are not willing to trust purely secular education—they fear its influence on the ideas and feelings of duty; and hence they labor to infuse poison into the educational stream, especially at its source. Fearing the influence

of intellect on feeling, they labor to influence intellect by feeling.

There is a physilogico-moral result arising from the habits which are necessary to intellectual culture. The application by which the intellect is disciplined exalts nervous action, refines the sensibilities, gives delicacy to the imagination, and elevates the tastes above the coarser forms of emotional enjoyment. To the mutual action of the intellectual and moral faculties as a veritable "evolution", must we ascribe the modern preëminence in humane feeling as shown by the decline of interest in vulgar and cruel sports, by the general improvement in manners, and the gentler treatment of madmen and criminals; and so marked is this change that, while the brutal persecution of men once gave pleasure, public sentiment now demands that the very beasts shall be treated with all possible kindness.

It is true that intelligent men may be cruel and unprincipled; but we are as little bound here as elsewhere to give up a general result because it is contravened by an exceptional experience. Morality has a bonded interest in every movement which is set on foot for the promotion of intellectual drill and the spread of knowledge. Increased self-study is one of the incidental, if not direct, results of increased intelligence. The more we know of ourselves and our manifold relations, the more clearly we realize that individual welfare is best promoted by right doing. The legitimate fruit of this cognition would be moral. One knowing that it is his interest to maintain the moral control of his impulses, will be far more likely than the unthinking man to adopt such measures as will afford the least possible stimulus to the baser impulses, and the greatest possible stimulus to the higher. It does not affect this view that the impulse may prove too strong for the moral forces which are summoned into action in consequence of the cognition; we only insist that the cognition has a moral value which it is unphilosophical to overlook.

But grant that this goes for nothing; that the feelings have such mastery over the intellect as to deprive it of all moral influence in the conduct of life, so far as the individual is concerned. Still when the recognition of a moral rule becomes the property of a community, it acquires a social sanction through which individual conduct is morally coerced (such is human nature) into conformity with the rule: and thus the

suppression of wrong impulses and the encouragement of right ones tend by virtue of a well-known law to the formation of such moral habits as the constitution of society at any time demands. Intelligence has here a double moral power. It renders the opposition to wrong doing more effective, while at the same time it is more likely than ignorance to have the correct standard of right doing. The sale of indulgences and the abuses it involved were accepted as well enough when Europe was in intellectual darkness, but when sufficient intellectual light dawned, energetic protest was made, and this form of priestly immorality was brought to an end. If the people of New York City had all been equally destitute of intelligence with the masses on which Tweed's popularity rested, are we to suppose that justice would ever have overtaken that rich demagogue? It was intelligence that looked up his crimes and the proof of them. It is intelligence that scoundrels dread most. If Spencer's teaching did not render it necessary, we need not repeat that there is no hope for political morality but in the intelligence of the people. There is no watching where there are no eyes to see.

Equally decided are the moral advantages of intellectual culture in the social sphere. Those with little real knowledge who have never learned to doubt their own wisdom are always confident they foresee results, and are over-sanguine of what they approve, and over-apprehensive of what they condemn, and are thus ever liable to fall into the immoralities of bigotry and fanaticism. Toleration and Christian charity flourish best in an intellectual soil. An ignorant person, if ever so good, is apt to impute a sinister origin to opinions which conflict with his own; and to believe and repeat the slander he hears of his neighbor. A person of intellectual culture may be sufficiently vicious to entertain calumny; but he would not dare to repeat a syllable of it in the society of cultivated people. The sentiment of justice gains accuracy of direction from intelligence, and thereby is developed a taste which favors tolerance in general, and will not brook the social habit of backbiting, so common among the ignorant. Every possible view we can take of it leads us to agree with Huxley, that ignorance is the enemy of us all and the ignorant man dangerous.

In the exuberance of his argumentations, Mr. Spencer appears sometimes not to be quite consistent. This opposition to the exercise of the educational function by government, we

believe to be a misapplication of his views on individual sovereignty. History shows that government is an organism of increasing complexity, in accordance with Spencer's law of Evolution. Government may, therefore, well assume the educational function in more diversified forms than ever; and it behooves Mr. Spencer to find reconciliation for what conflicts with current increase in governmental functions. Again, in the chapter referred to, he maintains that the reiteration of moral precept in church or school has little or no moral result. Elsewhere (First Principles, 117–119) he maintains that religious dogmas and their threatened penalties are necessary to the morality of the people who hold them. In the one instance, the methods of religious teaching, as in "cathedral towns", are declared to be without moral results; in the other, that the results of such teaching are necessary to morality. But we may note in passing, that this reiteration of dogmas and precepts, with or without emotion, is a very different thing from the planting of intellectual method and principle in the mind which shall energize the moral nature with a living force, in the individual and in the compound of individuals which we know as society. And it is just here that this bit of Spencerian philosophy is utterly at fault.

II. So far from the public school system relieving the parents of responsibility and generating improvidence, it appears in this country to have had precisely the opposite effect. In extensive districts of country where there was a decided aversion to more "larning" than just enough to "read, write, and cipher", the operation of the common-school system has entirely changed the prevailing sentiment by the discipline it has afforded both the old and young. Having taxes to pay for school purposes, the parents must understand the school law and meet together to take such action as might be necessary to secure the benefits of their share of the school fund. So far from neglecting the education of their children in consequence of the law, they were now more than ever bound to attend to it. Spencer's objections have no relevancy whatever to the American system in which the people by their representatives make the law, and by their own immediate acts carry it into execution. The people will coöperate for educational as for other ends, and they can do this most readily through the instrumentalities which political organization affords. The American common-school system is the means whereby the

better class of American citizens are able to reach, and to lift up the lower into some degree of equal culture and companionship with themselves. Only eyes looking through a false medium can see cause in this for apprehension of a diseased reaction in the future. It is true that the teaching of our public schools is very far from what it should be, but the system is one which has undergone a gradual process of "evolution", and the improvements already made give earnest of something better still to come.

Mr. Spencer is no doubt correct in most that he has written against legislative intermeddling; but there is evident fallacy in some of the applications which he makes of the idea. He presumes too fully on the homogeneity of practical examples, and he attempts the application of his principle in cases which it does not fit. It would be very handy, indeed, to march with Spencer's System of Philosophy in hand into all the complicated affairs of life, and, opening at the right place, learn just what to do and what not to do. But the affairs of life are not so simple; for, while a precept may be an unerring guide within certain limits, outside of these it may be utterly treacherous. The practical man must, at every step, weigh the case on its own merits, else he will be sure to make practical failures. If public education be a means to the realization and security of individual rights, it is protective, and, according to Spencer's own principles, a legitimate function of government. We had hoped that, when Mr. Spencer came in maturer years to treat of Sociology and Politics, he would abate some of the extreme views of his earlier work on "Social Statics", but the chapter under notice affords little ground for such hope.

Certain philosophers and scientists, among them Mr. Spencer, have fallen into the habit of decrying the culture which comes of books; and yet they are laboring, one and all, with commendable zeal to add to the list already so formidable. They would turn us away from books to the direct study of nature;—all of which would be very fine, if they could furnish us with the leisure and means to observe their precepts. But as their books are the most expensive, and, indeed, the only thing covering any considerable portion of the ground that students busy with life can afford, they must buy the books and use them as substitutes for living teachers, observatories, laboratories, museums, etc., which are so far beyond their reach. If only those who give their lives to the study of science at

first hand are to be esteemed educated, then must we recognize a sort of intellectual priesthood, for only the favored few are able to meet the conditions, and the many must look with reverence to them for *the* truth. J. S. PATTERSON.

THE TEACHER'S PREPARATION FOR ORAL LESSONS.

He who intends to make teaching a profession, is mistaken if he thinks his own study is completed when he has gained the information that is to be imparted to his pupils. It may be safely said that as many of the failures made in teaching are the result of not fully understanding how to deal with the minds of children, as are due to a want of proper familiarity with the subjects to be taught.

The greater the difference in mental development, the less, as a general rule, is the sympathy between the teacher and pupil. This is illustrated by the fact that children learn most readily from children—a fact that is admitted even by casual observers. It also accounts, in part, for the numerous cases in which teachers who have taken up the study of a new subject, and kept sufficiently in advance of their pupils to be familiar with the matter they teach, have succeeded even when the more learned have failed.

When a person has so completely mastered a subject as to be able to bring to mind at will, it is often the case that he forgets those difficulties which hedged up the way for a time when the study was a comparatively new one, and he fails to adapt his instruction to the young learner. But if the individual having the greater mental development, can learn to look at a subject from the standpoint of his pupils, he will then come into full sympathy with them and meet their condition and wants.

To this end it is necessary that each lesson to be given should receive due preparation, that the ideas contained in it may be successfully imparted to the pupils. While there are but few who deny that every teacher, at the commencement of his professional life, should prepare each lesson to be given, there are many who consider it unnecessary for the experienced teacher to give his lessons even a thought. But the ambitious teacher will certainly not rest satisfied with his old methods,

if by a little effort he can improve them; nor will he be content to repeat the same matter year after year when new facts are being developed in every subject.

In preparing an oral lesson the teacher should first consider the subject, and in selecting it he may take any one that treats of useful or interesting information, or that tends to the healthful development of the mind. It has been thought the subjects which can be successfully presented to a child are very limited in number; but the sources from which the child obtains its little store of knowledge, even before the school period arrives, are numerous, including nearly all the branches of natural science.

The teacher, in the second place, should take great pains to adapt the matter of the lesson to the capacity of the child's mind. Nearly every subject includes facts and principles which children can not understand, and much of their dislike of school is due to the attempt to memorize what is not understood. The child must begin with primary facts, and in after years proceed to the more complex and abstruse.

In the third place, the teacher should see the *point* of the lesson, and this should be clearly brought out. A lesson that has no point is not likely to be remembered.

In the fourth place, the teacher should give careful attention to the *method* of teaching the lesson—the method most likely to give the pupil clear conceptions. Different methods will suggest themselves to the mind of every live teacher; for the more one studies to obtain successful and pleasing methods, the more readily do they come to mind, and the less likely is one to fall into any set form. As a general rule the greater the interest of the teacher, the greater the interest of the pupil; and if, at the outset of a lesson, the method be such as to arouse the attention of the class, so much the more is added to the interest of the teacher. When the lessons of the day have thus been full of interest, we hear the teacher say, "I have *enjoyed* school to-day."

The method of teaching the lesson includes the art of questioning properly—an ability which all teachers do not readily acquire. As much depends upon the manner of questioning pupils, as upon any other feature of the lesson. Long, wordy questions should be avoided, not only because they are not readily comprehended, but because they avert the attention and detract from the interest of the class. Clear and concise

questions will often make a class seem bright and intelligent. General questions may be used to advantage to test the knowledge of the scholars, or by way of encouraging free and easy conversation in class; but, if a particular answer is required, such a question should not be used.

Pointed questions should be used to bring out particular answers, that the chain of thought be not broken by an answer out of place, or that the minds of the pupils may not be made to wander when they should be held to the point.

Direct questions are aptly put, when the admission or denial of a statement is wished upon which to base the next question; but at other times they only tend to encourage laziness, or a careless habit of thinking. Not only is it an easy matter to answer, "Yes or No", but a child soon learns from the manner of his teacher which is desired; and the lesson which thus costs him but little effort, he correspondingly appreciates and remembers.

Suggestive questions should not, as a general thing, be used. There may be cases, however, where the pupil is trying hard to think what to answer, but has in someway become puzzled, that the assistance of a suggestive question may be better than to let the pupil fail, if in so doing it tends to discourage him.

Questions of whatever kind should follow each other in such order that each may open the way for the next.

Finally, the value of a lesson largely depends upon an orderly running up of the facts brought out. A complete summary with appropriate applications serves "to clench firmly the nail now driven."

Red Wing, Minn. W. W. W.

EXPERIMENTAL NOTES.—II.

ANGLES OF INCIDENCE AND REFLECTION.

A well-known principle in Physics is, that when light is reflected from any surface the angles made by the incident and reflected beam with the normal line are equal. Many simple yet elegant methods may be used to prove this. It is done rudely by allowing the beam of light to fall upon a fragment of looking glass or any good reflecting surface, and using a long strip of lath or a yard stick to represent the normal line. The

dust in the atmosphere will by its illumination reveal the path of the beam, and the demonstration may be made with tolerable accuracy.

For a more accurate study of the law, I have used the following piece of apparatus, which can easily be prepared by any teacher: A circle about one foot in diameter is graduated—to degrees if possible. It is pasted near one end of a board—wide enough, about one inch thick and two or three feet in length. Two arms are fastened to the circle, so as to swing around it easily—one above the other. They extend to the circumference, and in the end of the lower a pin is stuck. At right angles to the other, and directly over the centre of the circle is fastened a bit of a reflector, which may be a piece of looking-glass or, as in my instrument, simply a piece of glass blackened. A slip of glass such as is used for microscopic objects is excellent. At the end of the board, in a line with the 0° and 180° line of the circle, is a small piece of wood, pasteboard, or metal, in which is a hole one-eighth of an inch in diameter to which the eye is applied. The use of the instrument is very easily learned. The arm with the pin is set at any point desired on the circumference. The other arm is now moved until with the eye at the hole the image of the pin is seen in the mirror immediately above the centre of the circle, which should be indicated on the mirror by a scratch on its back. When this position is reached it will be found, if the parts be in proper adjustment, that the arm with the mirror will invariably bisect the angle formed by the other arm and the zero line. The instrument, if nicely constructed, will afford an interesting verification of this law, and besides be of use in many other studies which will suggest themselves to the student.

I have also used the following exceedingly simple demonstration of the same law: A piece of transparent glass, plate glass is desirable, is set upon a table in a vertical position. Standing so that I can look down upon it and on one side, I place a bright object, a coin or small piece of metal on the table, and I see an image of it apparently on the other side of the glass. I take another small object, and place it on the table on the other side in precisely the spot which seems to be occupied by the image of the first. This is easily done, as both the image and the second object can be seen at one time. Upon measurement it will be seen that these two objects are at the same dis-

tance from the bottom of the reflecting surface. This proves that when an image of an object is seen in a plane mirror, it is seen as far behind the mirror as the object is in front of it. Drawing lines representing the beam *transmitted* to the eye and *reflected*, it will be seen at once that the relation of the triangles is such that the angles of incidence and reflection must be equal. This is the simplest method as far as the instrumental part is concerned, but it presumes on the part of the student a knowledge of the elements of geometry. The last device may be made useful in the study of mixtures of colors. Cards of two different colors being placed one on one side of the plate of glass and one on the other, we see the one by transmitted light and the other by reflected. A composition of colors is the result.

While speaking of light, I want to describe a simple method of testing the index of refraction of liquids. Cut out of cardboard a circle four or five inches in diameter, and draw in ink two diameters at right angles to each other. Assuming one of these to be the normal line to the liquid surface, construct any incident ray and its corresponding refracted ray in accordance with the assumed index of refraction. If this be correctly done, when the disk is immersed in the liquid up to the surface line, the incident and refracted beams will appear as one straight line. Refraction of light is very neatly shown by means of a rectangular vessel, a portion of one of the vertical sides being glass. The vessel when filled with water should be placed so the rays of the sun shall fall obliquely upon the top.

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NOTES ON FRENCH PRONUNCIATION.

There are doubtless many readers of the TEACHER that have some knowledge of French. To them these notes may be of some value.

1. *Bloc.* Many always sound the *c* (k) in this word. The best authority, however, makes the following distinctions: The *c* should only be sounded in such cases as *voyez ce bloc*, see this block, but in such phrases as *un bloc de marbre*, the *c* should not be sounded. It should also be sounded when followed by a

vowel or unaspirated *h*, as in *un bloc énorme*, an enormous block. In the plural, *blocs* in *des blocs de marbre*, *c* and *s* are both silent. In *des blocs énorme*, *c* is silent and *s* (as *z*) is sounded. Some, however, sound the *c* and leave *s* silent, and some even sound both as *kz*.

2. *Mœurs.* Surenne cites Féraud, Gattel, Masson, and Waïlly as in favor of sounding the *s*, and Chapsal, Domergue, Lemare, Noël, and Catineau as against it. He says that it is always articulated "at the end of a sense or sentence." Duffet also sounds the *s* (French Method, p. 16), but Littré says, "*ce n'est pas une bonne prononciation*", this is not a good pronunciation. He further says the *s* is not to be joined to the following word. He says nothing about *s* as being sounded at the end of a phrase, clause, or sentence.

3. *Fainéant.* Surenne represents the *ai* in this word by *é*, but adds:

"All lexicographers agree in pronouncing *fài*, in *fainéant* and derivatives, as *fé*, with *é* close; but, although obliged to submit, we protest against the unnecessary deviation from the pronunciation of *ai* sounded *è* open, because the French language being already too much loaded with the sound of *é* close, it would be more sonorous, and therefore more advantageous, if the above four words [*fainéant*, adj., *fainéant*, n., *fainéanter*, *fainéantise*] were pronounced with the open sound of *è*."

This recommended pronunciation is exactly that given by Littré, and he refers to no other.

4. *Fils.* The *l* in this word is always silent and the *s* (z) too except when followed by a vowel or silent *h*. Surenne says the *s* is also sounded when *fils* ends a sentence, as, *c'est mon fils.* This is condemned by Littré. He says, "*Beaucoup de gens ont pris depuis quelque temps l'habitude de faire entendre l's quand le mot est isolé ou devant une consonne, un fiss'; c'est une très-mauvaise prononciation.*" Many persons have adopted for some time the practice of sounding the *s* when the word is isolated or before a consonant, *un fiss'*; this is a very bad pronounciation.

5. The following is from Cotgrave's French and English Dictionary, 1660:

"*In the ends of words* x *is prononounc'd like* z *as* paix *peace*, prix *price*, *are pronounced* paiz, priz, *as in this saying,* aux faux jaloux deux yeux crevez, *of him who is causelessly jealous pull out both his eyes; in all these words* x *is pronounc'd like* z, *yet in this word* perplex *perplex'd,* x *keeps her sound, and in* vexer *to vex.*"

The sounding of *x* in these words is contrary to modern usage.

The old pronunciation is not even mentioned by Surenne or Littré.

The following is also from Cotgrave:

"*Some out of a lazie and soft feminin humor do leave off z at the end of words, as* s'il vous roulez dormi chez nous vous me serez gran plaisi, *if you will sleep with us you will do me a great pleasure, but 'tis better pronounc'd than omitted* [*sic*]."

The old practice of pronouncing *z* final in such cases is not alluded to by Littré.

5. *Neuf* (nine). Duffet teaches on p. 52, that *f* is silent when the following word begins with a consonant or aspirated *h*, and sounds like *v* when the next word begins with a vowel or silent *h*, yet in the table of numbers he has "9, neuf (ff)." This statement is defective. The following is complete: When *neuf* is followed by no other word in the same member of a phrase, *f* is sounded; when followed by an adjective or a substantive beginning with a consonant or aspirated *h*, *f* is silent; when followed by an adjective or substantive beginning with a vowel or silent *h*, *f* is sounded as *v*; in all other cases, as, *neuf et demi, tous les neuf arrivèrent à la fors*, *f* is sounded as *f*.

The statements as to the *f* in *neuf* made by Surenne, Levizac, Keetels, Fasquelle, Pujol and Van Norman, and Porney, like that made by Duffet, are defective.

Salem, Ohio. W. D. Henkle.

Note.—Littré is the author of the great French Dictionary published in Paris in 1873. This work is in four massive quarto volumes: vol. 1, A—C, vol. 2, D—H, pp. lx, 2080; vol. 3, I—P, vol. 4, Q—Z, pp. 2628. E'. Littré is a member of the French Academy. He was engaged twenty years on this great work.

—— "I do not, of course, insist with Rosseau, that a child should be taught nothing till the day on which he is twelve years old, and then that instruction should begin all at once. There is no hard and fast line that can be drawn between the two stages of development: the change from one to the other is gradual, and in point of time differs greatly with the individual. But as I have elsewhere said, I believe the difference between the child and youth to be greater than the difference between the youth and the man; and I believe further, that this is far too much overlooked in our ordinary education."—R. H. Quick.

SEVERAL PROBLEMS IN GRADED-SCHOOL MANAGEMENT.

BY E. E. WHITE.

A Paper read before the Elementary Department of the National Educational Association in Detroit, August 4, 1874.

There is a growing conviction among the more intelligent observers of our graded system of schools, that there are serious defects either in the system itself or in its administration. This conviction is the strongest where the schools have reached the highest degree of system and uniformity—where, in other words, the system, as a system, has attained the highest perfection.

That we may better consider these defects, let us glance at the mechanical features of a system of graded schools—not a real system as actually administered anywhere, but a system ideally perfect *as a mechanism.*

In the first place, it maps out and prescribes a definite and detailed course of study and instruction, the best that is practicable, if not the best theoretically possible. This course is subdivided, and the time for the mastery of each part, as well as the whole, is definitely fixed. The pupils are next divided into grades or classes, corresponding to the subdivisions of the course, and all the pupils of each grade or class are required to pursue the same studies, to the same extent, in the same order, and with the same rate of progress. In other words, the mechanism of the graded system demands *absolute uniformity* in each grade, and the more nearly this essential condition is realized, the more nearly perfect is its mechanical operation.

This view discloses the difficulties which attend the administration of the system. As a mechanism, it demands that pupils of the same grade attend school with regularity, and that they possess equal attainments, equal mental capacity, equal physical vigor, equal home assistance and opportunity, and that they be instructed by teachers possessing equal ability and skill. But this uniformity does not exist. Teachers possess unequal skill and power. Pupils do not enter school at the same age; some attend only a portion of each year; others attend irregularly; and the members of the same class possess unequal ability, and have unequal assistance and opportunity. This want of uniformity in *conditions* makes the mechanical operation of the system imperfect, and hence its tendency is to force uniformity, thus sacrificing its true function as a means of education to its perfect action as a mechanism. This is the inherent tendency of the system when operated as a machine, and hence the great difficulty in administering it is to control this procrustean tendency, and secure a necessary degree of uniformity without ignoring or forcibly reducing differences in pupils and teachers.

The foregoing remarks prepare the way for an intelligent consideration of several problems in the management of graded schools.

I. *How can pupils be taught in classes in a graded system without sacrificing their individual powers and wants?*

The pupils in graded schools, as we have seen, are divided into classes,

and to secure necessary economy these classes are made as large as practicable. The fewer the number of pupils embraced in the system, the fewer must be the number of classes, and, as a consequence, the greater must be the inequality in the attainments and capacity of the members of each class, and hence the greater the difficulty of the problem now under consideration. If the teacher of a class adapt his instruction and requirements to the maximum capacity of his pupils, the great majority are hurried over their studies and receive a superficial and imperfect training. If he adapt his class work to the minimum capacity of the class, the great majority are held back, and, as a consequence, not only sacrifice time and opportunity, but fall into careless and indolent habits of study. The remaining course is for the teacher to adapt his class work to the medium or average capacity of his pupils, with such special attention to the more and the less advanced pupils as may meet, to some extent, their wants. But here comes in the "percent system" with its demands. That the class, as a whole, may attain a high average per cent, it is necessary that the lowest members of it reach a good standard, and this results in the holding back of the bright and industrious pupils until by iteration and reiteration the dull and indolent may be brought to the required standard. The amount of time and talent thus wasted in some graded schools, is very great. This is not always evident to the teacher, since the brightest pupils, being chained to the dullest, soon learn to keep step, scarcely showing their ability to advance more rapidly. This difficulty is greatly aggravated when classes are promoted *en masse* from grade to grade, the pupils being thus chained to each other year after year, or throughout the course—an efficient process for reducing pupils to the level of mediocrity.

The statement of these difficulties suggests their partial remedy. The brighter and more capable pupils in each class must have the opportunity to work away from the less capable, and to step forward into a higher class when the difference between them and their lower classmates becomes too great for a profitable union in the same class. To this end there must be a proper interval between the successive classes, and the reclassification of pupils must be made with corresponding frequency.

Experience alone can determine what this interval should be and the frequency with which pupils should be promoted. It is possible that both of these facts may depend somewhat upon the number of pupils included in a graded system, a much more complete classification being possible in large cities than in small towns. While this may be true, it is believed by many experienced superintendents and other intelligent observers that the universal experience of graded schools condemns the prevalent practice of promoting pupils but once a year, with a year's interval between the classes. This wide interval is a serious obstacle in the way of a needed reclassification of pupils. The more capable pupils can not be transferred to a higher class, since this obliges them to go over the ground of two years in one—a task successfully performed by very few pupils—and the less advanced pupils can not be put back into a lower class without serious loss in time and ambition, if they are not withdrawn from school. It may be well for a few pupils in any system

of graded schools to spend an entire year in reviewing the previous year's work, but these exceptional cases are usually the result of an unwise attempt to hold pupils too long together. Large classes of young pupils can not be kept together even for one year, without serious loss both to those who are held back and to those who are unduly hurried. What is needed is a system of classification and promotion that shall provide for the breaking of classes at least twice a year, with a transfer of the more advanced pupils and their union with the less advanced pupils of the next higher class, and also with special transfers of bright pupils from class to class as often as may be necessary, and special provision for pupils deficient in some branch of study.

We are aware that the system of annual promotions has special advantages. It reduces the number of classes in the smaller cities and towns, and it saves labor and trouble, especially when classes are promoted in a body on a minimum standard. It is undoubtedly true that a procrustean system which puts pupils in classes, reduces them to the same capacity, and moves them regularly and evenly forward, requires little skill or trouble to run it, but this can not compensate for the serious losses involved. The highest good of pupils ought never to be sacrificed to secure a self-adjusting mechanism and uniformity of results.

II. Another problem in the management of graded schools, to which attention is called, may be thus stated: *How to subject the results of school instruction to examination tests and not narrow and groove such instruction.*

In a graded system of schools there must necessarily be some uniform basis of classification and promotion, since the object of classifying pupils is to bring those of like attainments into the same classes that they may advance together, and, at the same time, receive the greatest possible benefit from the instruction imparted. The promotion of pupils on the recommendation of teachers, or by classes without reference to relative attainments, is, as all experience shows, subversive of classification and thoroughness of instruction; and especially is this true in a system of schools comprising several departments or classes of the same grade. Teachers differ widely in skill and efficiency, and, as a general rule, the more superficial the teacher, the higher his estimate of the attainments of his pupils. Hence the relative acquirements and standing of pupils must be determined by the application of some uniform test; and the more thorough and comprehensive this test, the more complete, other things being equal, will be the resulting classification. Moreover, teachers as a class need the check of test examinations to prevent a too rapid advancement of their pupils. I have seen graded schools in which all proper classification was destroyed by the strife between teachers to advance their pupils into higher books and studies.

But whatever may be true of the necessity or value of test examinations, they are very generally employed in graded schools, and their character largely determines the character of school instruction. If the examination tests are narrow and technical, the instruction will be narrow and technical; if the tests run to figures, the instruction will run to figures; if the tests demand details, they will "emphasize and

make imperative all the lumber of the text-books"; if they cover only a part of the studies, the non-test studies will receive little attention. Indeed, it may be stated, as a general fact, that school instruction is never much wider or better than the tests by which it is measured.

This narrowing and grooving tendency of test examinations is greatly increased when the results are used as a means of *comparing the standing of schools and the success of teachers.* The principal of the first grammar school in one of the largest cities in the East once said to the writer: "My success as a teacher is measured by the per cent of correct answers my pupils give to the series of questions submitted in the examinations for promotion to the high school. Whatever qualifications these tests call for I must produce or fail. I can not stop to inquire whether my instruction is right or wrong. *I must prepare my wares for the market.*" Few teachers can resist the grooving influence of such a system, and, in spite of it, teach according to their better knowledge and judgment. I have seen blackboards covered with "probable" questions, and classes, meeting before and after school to be crammed with set answers to them, as a preparation for a test examination. I have known classes to memorize the names of all the bones in the human body, hundreds of dates in American history, and scores of the mechanical processes of mensuration, because these things were known hobbies of the question maker. I have known the instruction of an entire corps of intermediate or grammar school teachers to be largely concentrated on three or four test studies to the great neglect of other branches of equal, if not greater, importance. Principals have neglected the lower classes in their schools, and given their time and energies for weeks to the special drilling of their first class—the one to be subjected to the comparative test—and pupils have thus been fearfully overtasked.

The difficulties and errors thus pointed out suggest their remedies. We have only time for three or four specifications. The examination tests should be as wide as the approved course of instruction, covering every study and every important exercise. Since this can not be done when the examinations are conducted exclusively in writing, the written tests should be supplemented by oral ones, relating not only to the branches of study, but also to the discipline of the schools, their moral influence and life, the manners inculcated, and the general culture imparted. It is true that this will require time, but are not these things as important as the narrow and technical knowledge usually covered by the written tests?

Again, the questions should be so framed as to test the pupil's knowledge of the *subjects taught*—his comprehension of the leading facts and principles, rather than his familiarity with the details and verbiage of the text-book. They should place training before cramming, and culture before technics. It is true that classes thus examined will not reach as high a per cent as they would were the tests confined strictly to the text-books—were every question to fall within the prescribed course of instruction. But the object of a test examination is not to assist pupils in reaching a high per cent, but to determine what they actually know and to indicate *what they ought to know.* When classes reach an average

of ninety to one hundred per cent in a test examination, the fact is of itself evidence that the tests were either grooved to a narrow course of instruction, or that the special drilling of the more backward pupils was attended with a great sacrifice of time and opportunity on the part of the other pupils.

Another remedy suggested is, that the results of test examinations should not be used *to compare schools and teachers.* A careful observation of this practice for years has convinced me that such comparisons are generally unjust and mischievous. There is often a marked difference in the intelligence of the different districts in a city, in the number of pupils under instruction, and in other conditions for which the board of education and the public make no allowance. Moreover, these published tables of examination per cents often put a premium on special cramming and false teaching, and sometimes on downright dishonesty. The teacher who ignores higher motives and bends all his energies to secure a high per cent, is rewarded, while the teacher who scorns to degrade his high calling to the preparation of "wares for the market", is condemned. When the schools brought into comparison with each other are in the same building and under the same principal, these evils are more readily avoided.

A final suggestion is, that the pupil's standing should be the result not of one but of several examinations. The holding of monthly examinations, a practice now quite common in Ohio, and the West generally, I believe, is much better than the former practices of annual and term examinations. The reasons are too obvious to require their statement. I will only add that these monthly examinations are often a severe tax on both teachers and pupils. It is simply an outrage to require children to write from four to six hours a day under the severe strain of a test examination. The Society for the Prevention of Cruelty to Animals should so extend the sphere of its humane efforts as to include some of our public schools on examination days.

III. Another problem in graded-school management touches the freedom of the teacher, and may thus be stated: *How to subject a corps of teachers to efficient supervision and not reduce them to operatives.*

The adoption of a definite course of study with subdivisions corresponding to the number of classes, all following each other in natural order, necessitates the mastery of each of the successive portions as a preparation for the next higher. When the pupils in the lower grades or classes are sufficiently numerous to occupy several schoolrooms under different teachers, the progress and attainments of the several sections of each grade or class must be sufficiently uniform to enable them to come together in the upper grades or classes. This necessitates a degree of uniformity of instruction, and it is just here that *the mechanism of the graded system touches its very life,* as the experience of too many of the larger cities plainly shows. To secure this uniformity of instruction the course is mapped out in minute details, and the time to be devoted to each part, the order in which the steps are to be taken, and even the methods of teaching, are definitely and authoritatively prescribed. As

a result the teacher is not free to teach according to his "conscience and power", but his high office is degraded to the grinding of prescribed grists, in prescribed quantities, and with prescribed fineness—to the turning of the crank of a revolving mechanism.

The supervising principal of a public school in a large city once said to the speaker: "It is idle to ask my teachers to read professional works. They follow the prescribed course of study and look to me for their methods. Their ambition is to do their work precisely as I direct, and they do this without inquiring whether my methods are correct or incorrect. It is enough that I prescribe them." It is possible that this may be an extreme case, but it illustrates the tendency of the system, when administered as a mechanism. It seems unnecessary to say that this prescribed uniformity in both the matter and method of instruction, is subversive of all true teaching. Carpets may be woven, garments made, and stone carved by pattern, but the unfolding and informing of a human soul is not the work of operatives, following appointed forms and methods. The human soul is not touched by the revolving cogs of mechanical methods. True teaching requires the artist's hand and the artist's spirit. Fruitful methods may be evoked; they can never be imposed. They must bear the impress of the teacher's image, and pulsate with the life which he breathes into them. The vital element in every method of instruction is *what the teacher puts into it*, and hence the prime fact in every school is the teacher. It is not enough that graded schools go through with the forms of a philosophic course of instruction. The knowledge to be taught may be wisely selected and arranged, the successive steps may follow each other in natural order, and the entire mechanism may be so perfect that the revolving cogs touch each other with beautiful precision; and yet, if the whole be not vitalized by true teaching, the system is a failure as a means of education. The one essential condition of success is the informing, vitalizing spirit of free, earnest teachers; and the more philosophical the system of instruction attempted, the more essential is this condition. A routine of mere book lessons may be conducted by a blind plodder who can turn the crank and tighten the screws, but a system of instruction, having for its grand end the right unfolding and training of the mind and heart, requires the insight, the invention, the skill, the inspiration of the true teacher. We are slow in learning that philosophic methods of teaching are practicable only to those who have some insight into their principles. The oral teaching in our schools is often as deadening as the old text-book drills. Some of the object-lesson teachers out-Herod Herod in mechanical teaching, and if I were obliged to choose between the text-book grinder and the crank-turner of prescribed object lessons, I should unhesitatingly take the former, with the assurance that he would have something to grind!

But how can this difficulty be avoided in a graded system of instruction? How can requisite uniformity be secured and, at the same time, the teacher have necessary professional freedom? I do not assume to be able fully to answer these questions.

My first suggestion is, that a sharp discrimination must be made between *results* and *methods*. The essential thing in a graded system is, that there be necessary uniformity in results at stated periods, and this can be attained without denying the teacher freedom in his methods. This teacher will succeed best by one method and that teacher by another, and each should be left free to use his best power.

Another suggestion may be important. A course of study may prescribe a minimum amount of work for each school term or year, or as a condition of promotion, but the stated order and time of the subdivisions should be merely suggestive. Uniformity should be required only so far as it may be important or necessary. The essential result in a graded system is, that the several classes of the same grade come to the examination for promotion with like attainments. It is not important that the several teachers accomplish the same result day by day or week by week. Nothing is more ridiculous than the attempt to parcel out primary instruction and tie it up in daily or weekly prescriptions, like a doctor's doses. This week the class is to take certain facts in geography; to count by twos to fifty (to sixty would be a fearful sin!); to draw the vertical lines of a cube; to learn to respect the aged, etc.! This also suggests the folly of restricting teachers to the work laid down in the course. One teacher can accomplish more than another in the same time, and, if forbidden to widen her instruction, to turn into new fields, the surplus time will be wasted in useless repetition. A scheme of study can only prescribe the minimum, the essential course. Parallel with this, and diverging from it, are lines of important knowledge, which the teacher should be free to explore. Moreover, it is in these very diversions from the beaten path, that the most valuable instruction is often imparted. The teacher carries into them an unusual zeal and interest, and his pupils are thus quickened with a new inspiration. It is taken for granted in this suggestion, that the schools are supplied with well qualified teachers and this presupposes that they have received necessary professional preparation. We are beginning to recognize the fact that *the essential condition of the highest success of American schools is the thorough normal training of our teachers.*

But the great remedy for the particular evil under consideration is intelligent, flexible supervision. Supervision is of doubtful worth when it exhausts itself on the mere mechanism of a school system. It must, of course, secure uniformity and system, but these may be attained without grooving the teachers' instruction or sacrificing their professional freedom and progress. An experienced superintendent once remarked that his chief business was to keep his teachers out of the ruts. To this end the superintendent must be qualified to instruct, inspire, and lead teachers in the work of professional improvement, and his supervision must be flexible enough to allow free investigation and experiment. It is true that a corps of teachers, imbued with such an earnest spirit of inquiry and progress, will run in no one's groove, but what is thus lost in uniformity will be more than made up in vital teaching.

IV. A fourth problem in graded-school management is *the proper adaptation of the system to the needs of those pupils who can give only a part of their time to school duties.* "The schools", says a leading paper, "allow no divided allegiance. If the boy goes to school, he must go steadily, and give it the heart of the working day." No provision is made for children who must devote a part of each day to labor. Hence young children are taken out of school to assist in household duties, to sell papers or do errands, or to render other assistance, really demanding but a portion of their time. Many pupils are withdrawn from school at a very early age to learn trades. They are too young to work more than the half of each day, and would make even more rapid progress in manual labor if they could spend the other half in school. But the doors of the public schools are closed against them. They must choose between the shop and the school, and the necessity of earning a living as early as possible scarcely permits, in many instances, a choice.

The failure of the public schools to accommodate this class of pupils, the very class which, above all others, needs their advantages, has been too generally accepted as unavoidable. Whenever the necessities of the family have demanded any portion of the regular school hours, children have quietly dropped out of their classes, and the schools have gone on apparently unconscious of their absence. But the proposition to enact laws compelling parents to send their children to school, has raised the inquiry whether the schools are not responsible for some of the absenteeism to be thus corrected. It is urged that the first step is to adapt the schools to the necessities of all classes.

As a means to this end it has been suggested that the public schools should be organized on what is known as the half-time system—a system tried with encouraging results in Europe and also in the primary schools of several cities in this country. It is urged that the uniting of labor and schooling is the true idea, that children who devote their whole time for eight to ten years to schooling are not then likely to enter on manual labor with much enjoyment, and, besides, that labor and schooling, when united, assist each other. The half-time pupils prove, as a rule, as apt scholars as their full-time classmates, and, at the same time, more skilled workers than their unschooled work-fellows.

These considerations have certainly great weight, but I am not convinced that the adoption of the half-time system in the upper grades of our schools is necessary to secure the desired end. A great many of the pupils in city schools would not engage in manual labor the half of each day were the half-time system adopted. If in school only half of the day, they would spend the other half in idleness or on the streets, and some in worse places. When no home study is required, the present system allows some six hours a day and every Saturday for labor and recreation. This is found to be time enough for many children to do all the work that is provided for them It is possible that it would be better if all our youth had regular work the half of each day, but the public schools can not change the usages of society in this respect. They must conform to what is, rather than to what should be.

It has also been suggested that half-time schools might be organized for working children, and that the present system be continued for others. This involves not only a classification but a separation of children on the basis of maual labor, and we have already quite enough of this class principle in the organization of our schools. It is believed that the difficulty under consideration can be successfully met without organizing separate schools for working children. What is needed is to make the course of study and requirements of our schools flexible enough to accommodate this class of pupils. Instead of half-time schools, I would suggest *a half-time course of study* in all grades above the primary. It is not necessary to require all the pupils in our public schools to take the same number of studies and advance with even step through the course. This procrustean device must be given up, if the public school system is to do its full legitimate work as an agency for the education of the whole people. Instead of excluding pupils who can not meet all the conditions of a complete and thorough course of elementary education, it must provide for such pupils the best education possible under the circumstances. This may involve some loss in uniformity and system, but there will be a gain in usefulness—a result more important than mechanical perfection in classification.

The four great problems which we have thus imperfectly considered are preëminently graded-school problems, having their origin, so to speak, in the element of gradation. Other educational problems, as the teacher problem, the study problem, the sex problem, etc., relate alike to both graded and ungraded schools.

It is hoped that I am not understood to condemn the graded system, for the very aim of this paper is to assist in making the system more efficient and useful. It is also hoped that I am not understood to intimate that the defects pointed out exist in equal degree in all graded schools. I bear cheerful testimony to the fact that the gravity of these problems is appreciated by scores of superintendents in my acquaintance, and encouraging progress has been made in their practical solution.

It may also be remarked, in conclusion, that I have aimed more to state guiding principles than to solve these problems in detail. The one principle I desire specially to impress is, that the solution of each of these four problems is found in the *proper subordination* of the demands of the graded system as a mechanism to its great purpose as an agency for the education of the people—for furnishing every child with the best possible education it is capable of receiving in the actual circumstances which surround it; in the proper subordination of uniformity and system, which are but means, to the sublime end of unfolding, enriching, and beautifying the human soul—of touching human life in all conditions with elevating and beneficent power.

EDITORIAL DEPARTMENT.

—— We depart from an editorial rule this month in publishing the paper which we had the honor of presenting to the National Educational Association at its late meeting. Our reasons are a lack of acceptable contributions and our inability, owing to continued illness, to edit this number. In the discussion which followed its reading, Supt. W. T. Harris, of St. Louis, strongly indorsed the paper, and said if he could have his wish the paper should be printed in full-faced type, and hung up in every schoolroom of the United States. Prof. B. F. Tweed, of Boston, an experienced superintendent and an eminent teacher, added the suggestion that it should also be hung up in every superintendent's office. We have no such high opinion of the value of the paper, but we hope that it may contribute something to the improvement of our systems of graded schools. The last of the four problems considered in the paper was discussed in these pages a few months since.

—— Jean Paul Friedrich Richter asks, in the preface to Levana, "Why are there flower and weed gleanings of everything, but no wine or corn gleanings of the innumerable works on education." W. H. V.

—— A gentleman who has long been a close observer of popular tendencies and institutions, and who recently spent some time in a rural neighborhood in one of the New England States, gives it as his opinion that the influence of grange organizations is destined to work important changes in society and especially in our educational system. W. H. V.

—— Themistocles, the Athenian general, when demanding tribute from the revolted cities, gave it out that "he had on board his ships two powerful divinities—Persuasion and Force; and whoever would not follow the former must submit to the latter." The successful teacher, like the great military commander, must rely upon these potent agents. They are the chief divinities of school government. W. H. V.

—— Students of geography and history in the common schools may be grateful for the very marked improvement which publishers have recently made in maps. The most essential part of the science of geography is to be learned only by the perusal of good maps; the letter press of the text-books is quite secondary. Let the pupil once acquire the habit of inspecting maps, with a full understanding of their meaning, and he will inevitably become familiar with the principal features of the earth's surface. If we were called upon to choose between two text-

books in geography, our choice would be determined more by the merit of the maps in the respective books, than by any other or perhaps all other considerations. W. H. V.

——It is not uncommon to hear young teachers complain that they are obliged to instruct beginners in the elements, while they would prefer to teach the higher branches to scholars of considerable culture. This complaint may arise from a total misappreciation of the nature of the teacher's vocation. The best teacher has in view not his own education, but that of his pupils. His chief interest centers in the art of instructing and developing—not in the matter imparted. He takes peculiar pleasure in the building to be erected rather than in his lumber and tools. The primary teacher who is really master of his profession, discovers perhaps more intricate problems to solve, greater demand for consummate skill, and higher triumphs of educational genius, in his apparently humble position, than are possible in the advanced grades. Too much importance can scarcely be attached to elementary teaching. Too much credit can hardly be given to the successful primary teacher. W. H. V.

——It is curious to observe the first efforts of the child to exercise his powers and enlarge his range of experience. He begins to manifest his innate wish to *do* something, and to connect his little intelligence with things around him, by inarticulate crowing, and by vague, unsteady motions of limbs and body. His tiny fingers are always busy. He soon exhibits curiosity, and picks and pries into everything. His first attempts to walk are most awkward, feeble, and ludicrous. His activity is incessant. He rolls and tumbles and babbles for hours together. After hundreds of falls he learns to stand. How little control he has over his own motions. He starts to go forward, and staggers backward or to one side.

His first attempts to utter words are as wide of their aim as his first attempts to walk. He has no distinct idea of what he wants to do. His organs of speech are unformed. He makes the oddest approximations to correct articulation. The strong tendency to imitate everything he sees and hears continually incites him to make new trials of his powers. He mimics everything. Almost the whole of primary education is imitation. Therefore what little children most need are good models and examples. W. H. V.

THE NATIONAL EDUCATIONAL ASSOCIATION.

The annual meeting of this body at Detroit was not inferior in interest or attendance to the meeting held at Elmira last year. There were not present, however, so many of the eminent educators of the East. It is to be especially regretted that Pres't Eliot, of Harvard, and Dr. McCosh, of Princeton, were not present, as they were rather severely

handled by some of the speakers, and would doubtless have replied in such a manner as to have enlivened the discussions very materially.

Last year the proceedings of the Department for Higher Education were the central point of interest. The very able paper of President Eliot and the vigorous discussions which followed it were the attractions which first drew public attention to that department. These were followed by other papers so interesting as to hold the attention to the close of the session. This year the exercises in the General Association held the chief place. The address of President White, of Cornell, which it was known would be a reply to some of President Eliot's positions, and the paper of Dr. Clark, author of "Sex in Education", gave assurance in advance that this would be so.

The arrangements for the meeting of the Association were very complete, and never before were such full and excellent reports of its proceedings made by the press. We condense from these reports a brief outline of what was said and done.

GENERAL ASSOCIATION.

The Association met in the Opera House at 10 A.M. on Tuesday, Aug. 5th, President S. H. White, of Illinois, in the chair. Prayer was offered by Rev. J. P. Scott, of Detroit. The Association was welcomed to the city in a brief address by Hon. Duane Doty, Superintendent of Schools. President White responded in an appropriate manner, and immediately followed with his Inaugural Address. The chief topic discussed in this address was the labor question, and the educational bearing of the strife between labor and capital. He thought the question one deserving the serious consideration of the Association; whether it might not in some way be connected with our systems of education; and if so, to discover the defect and suggest a remedy. Said he, "We boast of our systems of free schools. But are not the people too apt to rest satisfied with systems, forgetting that very defective results may come from a poor administration of the best of them?" He attributes the dissatisfaction of the agricultural communities with the present condition of things to the inferior advantages possessed by them for the education of their children. He says: "Growth, development, is a universal characteristic of mind. Hence the youth from every part of the country aspire to the advantages of the higher schools and colleges generally found in towns and cities. Parents possessed of a competence and desirous of greater advantages for themselves and their families leave the country for the town with its larger privileges. What is the result? Do the young men and women, having enjoyed the higher advantages, go back and interest themselves directly with the people, and give them the benefit of their greater culture gained at public expense? Do those of them who have graduated at our normal schools generally return to teach in the little country schoolhouse where they commenced their own school days?" He thinks the remedy lies in perfecting our systems of public instruction. The agency to be employed to bring the country schools somewhere nearly to the level of town schools, he believes to be a better system of supervision.

President Tappan, of Ohio, moved that the suggestions made in the address of the President be referred to the general committee, which prevailed.

Rev. Geo. P. Hays, President of Washington and Jefferson College, Pa., read the report of the Committee, appointed at the last meeting, on Upper Schools. President Hays thinks ample provision has been made in most places for common school instruction, and where this has not already been done, there are forces operating that will ere long supply the deficiency. The same he believes to be more fully true in regard to colleges and professional and technical schools. Between the common school and college there is a gap for which the provision is very insufficient. To fill this gap we must look to the academies and high schools; but they have, thus far, met the requirement very imperfectly. He thinks one of the great needs of these schools is a class of teachers of higher learning and more enthusiasm, and with better pay. In addition to this, he would have the course of study so arranged as to make provision for the instruction of those who afterward design to take a college course. He thinks academies are to be the chief reliance in country places, and that a good one can be established in any neighborhood where a sufficient endowment can be secured to pay the salary of a principal, and that without such an endowment a good academy is scarcely possible. One of the chief difficulties in the way of good high schools is one which afflicts the whole system of state schools. It is the interference of gutter politicians with those matters about which they know nothing at all. Pandering to the prejudices of the rabble, for the sake of votes, they perpetually criticise and quarrel with every effort to elevate our schools, and so annoy able and sensitive teachers that they are driven out of the field, and it is then confided to such incompetent hands that its course of study must be lowered or they can not teach it.

Dr. Reed, of Steubenville, Ohio, followed in the discussion of President Hays's paper. He said there was a sad lack in Ohio of upper schools for boys. He thought the want was felt all over the country. He added that the high school of the present day is not the place for the education of the sons of Christian parents.

Mr. Cook, of Columbus, Ohio, denied the last statement of Dr. Reed. He claimed the high schools were furnishing just such an education as that gentleman advocated. His experience taught him that the worst boys in college came from private schools. The question was further discussed by Rev. Charles Hammond, of Massachusetts, W. T. Harris Dr. Ried, of Missouri, and by Dr. Hays.

Prof. W. R. Abbott, Principal of Bellevue High School, Virginia, delivered an eloquent address on the Professsion of the Teacher, at the evening session.

President White, not being present at the opening of the session on Wednesday morning, portions of a paper prepared by President Noah Porter, of Yale College, were read by President Thatcher, of Iowa University. It had been announced that President Porter was to take part in the discussion of the National University question, but through some misunderstanding on his part, his essay was on the subject discussed by

President Hays (Upper Schools). The line or argument pursued by President Porter did not differ widely from that presented by President Hays. He considers the preparatory schools of the country, as a rule, very defective. One of these defects arises from a lack of a uniform course of study. He thinks, too, they attempt to go over a great amonnt of ground rather than to do their work thoroughly; attempt the acquisition of knowledge rather than real culture. He believes elegant studies should be employed to relieve the monotony of Latin and Greek, and thus the general power of the student would be developed. Care should be taken, too, lest the student be injured by seeking to master difficult processes of thought at too early an age.

President White began his address by naming Germany and the United States as the two great modern nations preëminent for faith in public education and energy in providing for it. Germany stands first, for she has carried out her fundamental principle logically, not only providing primary and secondary schools for the young, but for those more advanced, technical schools and universities; while the United States has stopped short with her primary and secondary schools. The speaker condemned most emphatically the small sectarian colleges, as generally wanting in libraries, apparatus, and everything necessary in advanced education. As these institutions draw their nutriment mainly from sectarian effort, the controlling idea has become sect growth and not individual growth. As a result, each young man hears only professors of his own sect, or those affiliated with it. His philosophy, his history, his literature are cast in the sect mould. The main result is not so much to educate the young man's mind as to warp it. The speaker compared Michigan and Ohio as to their institutions of higher instruction, much to the disadvantage of the latter. He then proceeded to establish the following as the fundamental proposition of his paper:

"The main provision for advanced education in the United States must be made by the people at large, acting through their national and state legislatures, to endow and maintain institutions for the higher instruction, fully equipped and free from sectarian control."

He also argued the following subordinate propositions:

"That careful public provision by the people for their own system of advanced instruction is the only republican, and the only democratic method."

"That by public provision can private gifts best be stimulated."

"That by liberal grants alone can our private endowments be wisely directed or economically aggregated."

"That our existing public-school system leads us logically and necessarily to the endowment of advanced instruction."

To the assertion that "institutions for advanced instruction are for the wealthy, for rich men's sons, and not for the poor", President White replied as follows:

"Nothing could be more wide of the fact. The rich man is indeed vastly interested, indirectly; for thorough provision for advanced education will raise a thoughtful class of men who are the natural enemies of all the wild theories which tend to desolate society or disturb public prosperity; but if any person more than another is fully and directly interested, it is the poor man. The rich man can send his son to another

state or another country—the poor man can not. The doctrine I advocate is the only one which in many parts of the country can insure a worthy education to the sons of poor men. The whole experience of the world shows that from the ranks of poverty comes by far the greatest part of the genius and talent and energy of the world. In the great majority of our states this great class can have no chance for any advanced education, unless there be public endowments for advanced instruction."

John Hancock, of Ohio, followed in the discussion of the question. He believed in a national university, but did not think sectarian education inconsistent with state education. He thought the two not necessarily antagonistic. A national university ought not to do the work now done by the small colleges, but should supplement that work. Such a university would give an opportunity for general investigation and original scientific work backed by the wealth of the nation. He also defended the small colleges of Ohio, and referred to the number of eminent men that state had produced in every field of mental activity, as evidence of the quality of their work.

W. T. Harris, of St. Louis, thought the national university would tend to advance the character of the schools, and the cause of education throughout the country, and would raise the standard of scholarship among the members of Congress.

Hon. E. E. White, of Ohio, entered a protest against the making of this Association a battle-field between rival classes of institutions. He admitted that President White had strong provocation for the assault which he had made on the colleges of the country, but he was sorry that it had been made. He hoped this controversy would stop here. The effect of the address had been to wound the sensibilities of all the representatives of the colleges which had been belittled. He believed the smaller colleges were doing a great and noble work in the cause of higher education. They were graduating as good scholars as the larger colleges and universities. He also defended Ohio against the remarks of President White.

Dr. Hammond, of Massachusetts, said that he heard with extreme pain the word "sectarian" used by a graduate of Yale College. He believed the sectarian schools occupied a position among the educational institutions of the country second to no others, and that every honest and true educator should give them all the encouragement in his power.

Presidents Hays and Wallace also spoke warmly in defence of the smaller colleges.

President White closed the discussion. He said nothing had been further from his intention than to say a word derogatory to Ohio; that he had too many good friends in that state, and had been associated with too many noble youths from it in Cornell University to express any sentiments defamatory of its people. In conclusion, he said he had not a word to say against the members of the faculties of the sectarian colleges. He believed that from them men might be secured fit to equip the best institutions in the world. What he condemned was the system under which many noble men are, in a measure, forced to waste their lives.

At the evening session an address was delivered by Hon. J. George Hodgkins, Deputy Superintendent of Public Instruction for Ontario, on the "System of Public Instruction in Canada." He explained the system in detail. It has the primary school, the high school, and the university. The system differs in several important respects from that in force in the United States, as in regard to the executive, who is a non-political and permanent officer. The Rev. Dr. Ryerson has held the position for thirty years. It is understood in Canada that the educational system is not one that should be subject to political changes, and also that it should possess permanence above all things. The inspectors hold their offices during good behavior, and to obtain these positions they must possess first-class certificates. A provision is made in Canada whereby teachers at sixty years of age may retire if they desire to do so, and receive pensions according to the length of time they have taught. The pensions amount to enough to materially assist the teachers in obtaining a livelihood during the remainder of their careers. The school exercises are by statute provision opened with prayer and the reading of a passage of the scriptures. Separate schools are practically possessed by the Roman Catholics, and they thus have the control of the religious education of their children. The Roman Catholics are, however, compelled to contribute to the general education fund.

Edward H. Clarke, M.D., of Boston, read on Thursday morning an exceedingly able address on the "Building of a Brain." Two problems are presented to American educators. The first is to develop the individual to the highest degree; and, secondly, to obtain this development without interfering with the perpetuation of the best. Brains rule the world and the individual. The problem of the age which educators are to solve, with all the light that experience, aided by physiology and reflection can give, is how to build the best brains out of the materials given to work with. The demand of humanity is, give me the best possible brain for men and women both. Unless men and women both have brains, the nation will go down. As much brain is needed to govern a household as to command a ship; as much to guide a family aright as to guide Congress aright; as much to do the least and the greatest of woman's as to do the least and the greatest of man's work. In one sense the process of brain-building is alike for the two sexes; in another sense it is different. It is the same for both, inasmuch as the process, which evolves the best possible brains, by means of appropriate exercise, including cerebration, out of the underlying organization, is alike in the two sexes. It is different for the two in so far as there are any organs or sets of organs in the structure of one sex that are not in the structure of the other.

The only differences between the sexes is sex; but this difference is radical and fundamental, and expresses itself in radical and fundamental differences of organization, that extend from the lowest to the highest forms of life. Progress is impossible without accepting and respecting difference of sex. That it is physiologically possible to diminish it, by an education arranged to that end, no physiologist can doubt; nor can it be doubted that identical methods of educating the sexes, such as

prevail in many of our schools, tend that way. One result of a school animated by such methods, is to make a very poor kind of men out of women, and a very poor kind of women out of men. An appropriate education (of boys and girls) will recognize the special difference, guard against the special dangers, and obtain the special benefits that spring from sex.

At the conclusion of Dr. Clarke's address, Prof. James H. Orton, of Vassar College, read an address entitled "Four Years at Vassar." This was followed by an address from Prof. J. K. Hosmer, of the University of Missouri, on the "Coeducation of the Sexes in Universities."

The evening session was occupied with a discussion of the question of the coeducation of sexes, and by short addresses. Dr. A. B. Palmer, of Michigan University, Prof. W. A. Bell, of Indiana, Dr. Ried, of the Missouri State University, and Prof. E. Olney, of Michigan University, spoke in favor of the coeducation of the sexes, adducing their own experience as educators as to its value and safety.

The President of the Association then called out Dr. Hodgkins, of Ontario, Supt. Riggs, of Utah, W. D. Henkle, of Ohio, Gen. Eaton, National Commissioner, and Mr. Hunter, of North Carolina, who responded in appropriate remarks.

The Association adopted the following among other resolutions:

Resolved, That the Association reaffirms the declaration of opinion voted at the last annual meeting, that the proceeds of the sales of the public lands should be set apart by Congress under such conditions as it may deem wise, as a perpetual fund for the support of public education in the states and territories.

Resolved, That this Association does hereby reaffirm its former declarations in favor of the establishment of a National University devoted not to collegiate but to true university work, providing higher instruction in all departments of learning, and so organized as to secure necessary independence and permanency in its management.

Resolved, That a committee of this Association, consisting of thirteen members, be appointed to lay this subject before Congress, with power to appoint a sub-committee in each state for coöperative effort.

The following members were appointed the committee on National University under the last resolution: J. W. Hoyt, Wisconsin, A. D. White, New York, John Hancock, Ohio, W. T. Harris, Missouri, David A. Wallace, Illinois, Mark Hopkins, Massachusetts, Joseph Henry, District of Columbia, W. F. Phelps, Minnesota, D. F. Boyd, Lousiana Alexander Hogg, Alabama, Geo. P. Hays, Pennsylvania, and Z. Richards, District of Columbia.

The following are the officers of the Association for 1874–5: *President*, W. T. Harris, Missouri; *Secretary*, W. R. Abbott, Va.; *Treasurer*, A. P. Marble, Mass.; *Vice-Presidents*, C. S. Venable, Va., J. M. Fleming, Tenn., Geo. Thatcher, Iowa, Miss H. A. Keeler, Ohio, Jas. Cruikshank, New York, A. C. Shortridge, Ind., Mrs. Anna R. Diehl, Pa,, Mrs. M. A. Perkins, Mich., Mrs. M. A. Stone, Conn., J. K. Wilson, S. C., T. W. Cordoza Miss., and Alex. Hogg, Ala.; *Counselors*, John Eaton, D. C., S. H. White Ill., R. Woodbury, Maine, A. P. Stone, Mass., B. G. Northrop, Conn., J. C. Greenough, R. I., J. W. Armstrong, N. Y., Marcius Willson, N. J.,

J. H. Binford, Va., J. O. Wilson, D. C., Wm. R. Creery, Md., R. S. Greener, S. C., A. Pickett, Tenn., J. H. Patterson, Ky., Miss M. R. Gorton, Ark., James Johonnet, Mo., H. D. McCarty, Ks,, S. R. Thompson, Neb., W. A. Bell, Ind., D. Putnam, Mich., John Hancock, Ohio, Henry Jones, Pa., O. H. Riggs, Utah, and O. Hunter, N. C.

Our space will permit but the briefest mention of what took place in the several sections. Many of the papers read were very able, and the discussions which followed of unusual interest.

DEPARTMENT OF HIGHER EDUCATION.

The deliberations of this section were presided over by Dr. Reid, of the University of Missouri. The paper of Prof. Peabody, of Harvard University, on "Elective Studies", and the discussions which followed occupied the first session. These discussions were participated in by Prof. Hammond, of Mass., W. D. Henkle, of Ohio, Prof. Butler, of Wisconsin, President Wallace, of Illinois, Prof. G. W. Hoss, of Ind., Prof. Olney, of Mich., and Dr. Taylor, of Wooster, Ohio. In answer to a question, Prof. Peabody said the elective system does cost a great deal more than the uniform system, but its introduction need not necessarily at once involve an increase of cost.

On the afternoon of Wednesday, a paper was read by Prof. Charles S. Venable, chairman of the faculty of the University of Virginia, on the plan of that institution of learning. The course of instruction in the University was represented as very broad and thorough, and the examinations as exceedingly rigid.

President Andrews, of Marietta College, Ohio, expressed his doubts as to whether a course of study which so many, on a rigorous examination, failed to pass was entirely such a one as could be recommended to the people or meet their wants.

Dr. John W. Hoyt, of Wisconsin, followed Prof. Venable, in a paper on a National University. It was chiefly devoted to a review of the address of President Eliot, at Elmira. The paper was most severe in its tone.

The exercises of Thursday afternoon were opened by Prof. James D. Butler, of Madison, Wisconsin, in a paper on "Classical Studies in Higher Institutions of Education." The Professor occupied the time allotted him, showing that the dead languages must be studied, and why they deserve the educational honor they now enjoy.

Dr. Patterson, of the University of Virginia, next read a paper on "University Endowments." He defended the endowment system, as a necessity in the higher American education.

The following gentlemen were elected officers of the Department for the year 1874–5: *President*, Geo. P. Hays, Washington and Jefferson College, Pa.; *Vice-President*, I. W. Andrews, Marietta College, Ohio; *Secretary*, Charles S. Venable, University of Virginia.

DEPARTMENT OF NORMAL SCHOOLS.

This section of the Association was presided over by Prof. J. H. Hoose, Principal of the Cortland Normal School of New York, who in a short address laid down what he considered the scope of the investigations

belonging in an especial manner to educators engaged in normals chool work.

Professor John Ogden, of the Ohio Central Normal School, then read a paper on "What constitutes a Consistent Course of Study for Normal Schools," This paper had evidently been prepared with great care and labor, and covered the whole ground of the question discussed in a thor ough and judicious way, presenting, however, the work of the ideal normal school, rather than that attempted by the normal schools as they exist in our country. Prof. Ogden recommends that there be two parallel courses of study for normal schools: 1. The purely academic, which need not differ materially from the ordinary course of high schools and colleges. 2. The purely normal, which shall deal with man as an educable being—man historically, psychologically, and physically, and in all his possible relations in life, and at every stage of his growth.

This subject was discussed by Dr. Armstong, of the Normal School of Fredonia, New York, Prof. Beard, of Shippensburg, Pennsylvania, Prof. Charlton, of Wisconsin, Prof. Mason, of Carthage, Missouri, Prof. Jones, of Indiana State Normal School, and Prof. Johonnet, of Missouri.

On Wednesday afternoon, a paper on "Training Schools in Connection with Normal Schools" was read by Prof. J. C. Greenough, Principal of the Rhode Island State Normal School. Prof. Greenough, whilst emphasizing the importance of a training school, considered its work as lying outside of the normal school proper. He thought the training school should not, in its organization, be a part of a normal school, separated from the schools of the community. The *sine qua non* of a training school he believed to be a sufficient number of excellent critic-teachers.

A spirited discussion of this paper followed, participated in by John Hancock, of Ohio, Prof. Mason, of Missouri, Prof. Beard, of Pennsylvania, Prof. Putnam, of Michigan, Prof. Titus, of Minnesota, Prof. Ogden, of Ohio, Prof. O. H. Riggs, of Utah, Prof. Bellows, of Michigan, and Prof. Greenough.

The President then introduced Prof. Larkin Dunton, Headmaster of City Normal School of Boston, who read a paper on "What are the Essentials of a Profession? and what is necessary to entitle our Normal Schools to be called Professional?" Our limits do not permit us to give a synopsis of this able paper. It was discussed by Professors Putnam, of Mich., Jones, of Erie, Pa., Ogden, of Ohio, and Riggs, of Utah.

The first business of the last session of the section was the reading of a paper on "Manner and Method" by Prof. Soldan, of the St. Louis Normal School. The President introduced Prof. W. N. Hailman, of Milwaukee, who had kindly volunteered as reader, in the absence of Mr. Soldan. Method differs from manner. A road leads to a town, and is not liable to change, but the manner of using it differs; some walk, others ride. The road represents method; the way in which it is used manner. The utmost freedom should be allowed teachers in manner. Method is more scientific, being based on the lasting essence of psychology. Manner is inferior to method, being less enduring and essential.

A discussion followed, participated in by Professors Hoose, Hailman, Jones, Beard, and Bellows. All spoke in eulogistic terms of the clear definitions of the essay.

The following officers were elected to serve the ensuing year: *President*, J. C. Greenough, R. I.; *Vice-President*, J. S. Jones, Ind.; *Secretary*, C. F. R. Bellows, Mich.

DEPARTMENT OF ELEMENTARY INSTRUCTION.

Miss Hattie Comings, of the North Missouri State Normal School, presided at the meetings of this section. The first exercise before the section was a paper by Hon. E. E. White, of Ohio, entitled "Several Problems in Graded-School Management." The speaker discussed the following questions: 1. How can pupils be taught in classes in a graded system without sacrificing their individual powers and wants? 2. How to subject the results of school instruction to examination tests, and not narrow and groove such instruction. 3. How to subject a corps of teachers to efficient supervision and not reduce them to operatives. 4. A proper adaptation of the system to the needs of those pupils who can give only a part of their time to school duties.

John Hancock, of Ohio, thought the graded system of schools a necessity growing out of the large number of pupils required to be taught by one teacher; and that the only remedy for its defects was the thorough training of teachers.

Mr. Rolfe, of Chicago, would classify pupils in each study according to capacity. Because pupils were in the same class in geography, it did not necessarily follow that they should be together in grammar or in mathematics.

Mr. Jones, of Erie, Pa., thought that the argument of the paper was, that the graded-school machine needed adjustment. But we might as well turn our backs on civilization itself as to turn our backs on the graded system.

Mr. Curran, of Sandusky, felt that the tendency of Mr. White's paper was to strike a blow at the graded-school system, though doubtless there was no such intention by the author.

Dr. Harris, of St. Louis, liked the paper so well that if he had his own way he would have it printed in full-faced type, and hung up in every schoolroom in the United States.

The subject was discussed further by Superintendents Rickoff, of Cleveland, Pickard, of Chicago, and Tweed, of Charlestown, Mass., and Mr. E. M. Avery, of East Cleveland.

The paper for Wednesday afternoon was by Miss H. A. Keeler, of Cleveland, on "Language Lessons in Elementary Schools." Miss Keeler would have children first carefully trained in language by conversation exercises. Then she would have them trained in the language of description. To do the latter they should be taught to *see* things as they are. She would also have them exercised frequently in the reproduction of the language of others. She said she would avoid above all things harsh reproof for an innocent mistake. More harm is done by harsh criticism than mistakes let pass without any criticism.

Mr. Shilling, of Wisconsin, announced himself as a teacher of the deaf and dumb, and said that he had employed almost the same method of teaching as that recommended by Miss Keeler. He considered it the most natural and hence the best method of teaching such subjects as were capable of being taught by it.

Mr. Bell, of Indiana, did not agree with Miss Keeler's views on the importance of early and sharp criticism. He believed that a child should be corrected on the instant of every considerable mistake. He said he had himself received irreparable injury from the want of such training in his youth.

The other speakers on the subject were Dr. Carlyle, of Ontario, Johonnet, of Mo., and Farnham, of N. Y.

Dr. J. W. Armstrong, Principal of the State Normal School, at Fredonia, N. Y., delivered an address on "Science in Elementary Schools." The address was chiefly descriptive of simple experiments in natural philosophy, which he performed in view of the audience, showing by what simple apparatus important philosophical principles can be illustrated.

On Thursday afternoon, Mrs. A. C. Martin, of Boston, read a paper entitled "What shall we attempt in our Elementary Schools?" She said the ideal of elementary education ought to be a discipline that has taught the scholar steadiness and control; that has made him do something for himself intellectually. She would not propose any radical changes in the subjects of study. She would not, however, teach half the amount of arithmetic that is usually taught in the lower grades. She would teach more history, and especially English history. The geography ought to accompany every hour of work in history.

The subject was discussed by Mr. Mason, of Mo., Mrs. Stone, of Mich., Prof. Peabody, of Harvard College, and Supt. Pickard, of Chicago.

Miss Elizabeth Peabody, of Cambridge, Mass., addressed the section on the subject of "Kindergartens."

The following officers were elected for the coming year: *President*, Alfred Kirk, Chicago; *Vice-President*, Miss H. A. Keeler, Cleveland, Ohio; *Secretary*, Lucy Maltby, Warrensburg, Mo.

DEPARTMENT OF SUPERINTENDENCE.

Supt. William R. Creery, of Baltimore, presided over the deliberations of this body. The only question considered by it was the best plan of collecting and keeping educational statistics. The report upon the subject was made by the Hon. T. W. Harvey, School Commissioner of Ohio. After a full and careful consideration of the report, the forms for statistical tables recommended were, without material alteration, adopted, and were submitted to the United States Commissioner of Education for his consideration.

Statistical forms for city reports were submitted by Supt. A. J. Rickoff, of Cleveland. These after discussion and a few slight alterations were also adopted, and submitted to the same official.

The following officers were elected for the ensuing year: *President*, J. Osmond Wilson, Washington, D. C.; *Vice-President*, A. Abernethy, Iowa; *Secretary*, R. W. Stevenson, Columbus, Ohio.

THE NATIONAL NORMAL MERGED IN THIS JOURNAL.

We are happy to announce that arrangements have been completed for the merging of the *National Normal* in this journal after this (October) issue. The NATIONAL TEACHER will be sent to the subscribers for the *Normal* during the unexpired term of their subscriptions, with extension of time to those who are already taking the TEACHER.

Prof. R. H. Holbrook, editor and proprietor of the *Normal*, will be a Special Contributor to our journal. He will prepare a series of pointed and practical papers of special interest and value to young and inexperienced teachers. He will also continue the compilation of the school statistics of the different states and leading cities, and we shall publish the more important tables from time to time, as we can afford the space.

We improve this opportunity to say that we have never regarded the *National Normal* as a rival to our journal. It has been conducted with a different aim, and has largely occupied a different field. It has had a character and a mission of its own, and it has developed the one and filled the other with an energy and ability worthy of the highest success. Its characteristic features have been a succession of new departures in educational journalism. In brief, the *Normal* has been an original and unique journal, and its suspension will not simply be a reduction in the number of educational journals of the common type, but the disappearance of a journal that leaves no representative. We wish the retiring editor large success in the enterprise to which he proposes to give his undivided attention.

EDUCATIONAL INTELLIGENCE.

The very excellent report of the Detroit meeting of the National Teachers' Association, which we publish in this number, was kindly prepared for us by Supt. Hancock, of Dayton. We are also indebted to Prof. W. H. Venable, of Cincinnati, and Rev. Dr. Moore, of this city, for valuable assistance in editing this number. The meagerness of our intelligence department is due to the fact that continued ill health has prevented our preparing the items, and we found no one who could do it for us. We hope to make this department full next month.

——THOSE of our readers who read our paper on graded school problems in the *Detroit Free Press* are requested to re-read it as it appears in this number. The *Free Press* copy contains several very bad misprints, the most provoking of which is the substitution of "mendicants" for *mediocrity*, in the seventh paragraph. That compositor is likely to become a mendicant if he keeps on sinning in this way!

——MR. C. W. OAKES, for three years past in charge of the public schools of Bellefontaine, is superintendent of the public schools of Norwalk, O.; salary $1,600.——Mr. S. Puckett, last year at Ravenna, is superintendent of the public schools of Paris, Ky. We commend him to the

Kentucky fraternity.——Miss Sarah D. Harmon, of the high school of Warren, O., has taken charge of the high school of Attica, Ind.; salary, $800.——Mr. E. S. Cox, of Beverly, O., is superintendent of the public schools of Parkersburg, W. Va.——Mr. F. D. Davis, for several years in charge of the schools of Oxford, O., is superintendent of public schools of Montezuma, Ind.——Miss Rose McCleary, Pittsburg, whose card is in another place, will teach elocution in teachers' institutes.——Hon. Newton Batemen, for many years the able and efficient Superintendent of Public Instruction of Illinois, has accepted the presidency of Knox College, Ill. Knox College has a wise and sound head.——Mr. A. E. Wardner, for two years past in charge of the schools of Macon, Mo., is superintendent of the public schools of Jefferson City, Mo.——Miss Sarah C. Sterling, of Three Rivers, Mich., is now teaching at White Hall, Mich.——Mr. A. Earthman, formerly principal of the public schools of Reedsburg, Wis., has gone to St. Paul, Minn.

——The reëlection, by acclamation, of Miss Delia A. Lathrop, as principal of the Cincinnati Normal School, at a salary of $2,000, is not only a personal, but a professional triumph, meriting general congratulation. It is a discredit to the Cincinnati Board that this creditable action was delayed for more than two months. It is a marvel that any body of intelligent men should have even considered the claims of the man who was the chief aspirant for her position. It would have taken him less than a year to blow up the school, or render it not worth the powder. Miss Lathrop's qualifications for the position are unequaled, and her success has been not only eminent, but brilliant. In the face of great difficulties, she has made the Cincinnati Normal School a credit to the city and the country. There is not a corps of teachers in the United States that would not be proud to count her one of their number.

——The Ohio Central Normal School has added another permanent instructor to its faculty, thus enabling Prof. Ogden, associate principal, to devote part of his time to attending teachers' institutes. Prof. Ogden has had an extensive experience in institute work, and he proposes to make this a specialty. Institute committees will do well to correspond with him early respecting engagements for the ensuing year. See his card in another place.

——Miss Flora T. Parsons, for nearly two years one of the associate editors of the *New York State Educationl Journal*, representing institutes, died June 21st in Bricksburgh, N. J., from consumption. We met Miss Parsons at several institutes two years since, and were much pleased with her lessons and lectures. She was one of the leading female teachers of the country.

——The *Commercial* states that the Chickering Institute, Cincinnati, has opened the new year with 180 pupils, and a senior class of 22. Of the seven or eight young men sent to Eastern colleges or scientific schools from this institution this year, not one received a "condition."

BOOK NOTICES.

A MANUAL OF MEDIÆVAL AND MODERN HISTORY. By M. E. THALHEIMER, formerly Teacher of History and Composition in the Packer Collegiate Institute, Brooklyn, N. Y. Cincinnati and New York: Wilson, Hinkle & Co.

Here is a text-book, the elegant appearance of which corresponds with its substantial merit. We like it even better than the author's most excellent "Manual of Ancient History" published a year or so ago. Miss Thalheimer is something more than a mere compiler; she is an investigator, a philosophical thinker, well-read, discriminating, scholarly. Her style of composition is very agreeable, full of vigor, and sometimes quite dramatic.

The labor of preparing the present volume must have been severe and exhausting. The manual contains 480 pages, comprising the brief history "of fourteen centuries, from the fall of one empire at Ravenna to the establishment of another at Berlin." Much the greater part of the work is taken up with the history of Europe and its dependencies. Instead of following out the histories of the separate political states, as Weber did in his "Universal History", Thalheimer has chosen the more difficult method of developing the world's civil progress as a whole. This method gives an interest and unity to the subject that otherwise it could not have. Five historical periods are defined, and each of these is made the subject of a separate book. These periods are: The Dark Ages, The Middle Ages, The Period of American Discovery, and of the Rise of States-System in Europe, From the Peace of Westphalia to the Beginning of Revolutions in Europe, From the French Revolution to the Rise of the German Empire.

The sources of information sought in the preparation of the Manual are the best and most recent. One is impressed with the feeling that the authoress writes out of a full mind in which her abundant material has been well digested, She writes in an independent spirit, not so much *following* authorities as walking with them. We could wish that a writer of so much character and skill might devote her talents to the production of a historical work of greater originality than a book intended chiefly for educational uses will admit of.

The twelve beautiful maps with which the Manual is embellished, are alone worth more than the price of the volume.

The Recapitulations at the end of sections, and the Review Questions at the end of each book, afford admirable aid to both teacher and learner in the use of the book in the recitation room. The Index is remarkably copious,—a fact that those who understand the practical use of books, will readily appreciate. W. H. V.

GOODWIN'S GREEK GRAMMAR. "An Elementary Greek Grammar, by WILLIAM W. GOODWIN, Ph. D., Eliot Professor of Greek Literature in Harvard University." Boston: Ginn Brothers.

A new Greek grammar, in a generation which has been favored with the works of Krüger, Madvig, Curtius, Sophocles, and Hadley, would seem to be superfluous. But every teacher of Greek has felt the need

of a grammar which, while full and clear upon the fundamentals of the language, shall not distract and discourage the pupil by too minute reference to unusual forms or constructions. Prof. Goodwin in his grammar aims and successfully to furnish a book which shall give all that is essential to the student in the earlier part of his course in Greek. "The plan has been to exclude all detail which belongs to a book of reference, and to admit whatever will aid the pupil in mastering the great principles of Greek grammar." It is not designed to supersede the grammar of reference, which must be constantly in the hands of the advanced scholar. The student who faithfully masters it will, however, find himself furnished with the key to the noble literature of the noblest of tongues. Long and careful thought and observation have convinced us that in the ordinary course of instruction in Greek, relatively too much time is expended on dialectic peculiarities, unusual constructions, and grammatical niceties, and too little on the actual literature of the language. Too much on what simply taxes the memory; too little on that which engenders thought and fosters taste. Less Greek is read in our colleges by far than should be—vastly less than could be in the same time if the chief end were to give a knowledge of the language in its broad sweep of thought and expression, and not to fill the memory with its dialects, its forms, and its idioms. To a certain extent these are necessary to any correct knowledge of the language. To the finished scholar they are indispensable. But as we would not require of the foreigner who wishes to read the classics of English literature that he fill his memory with the dialects of Chaucer, or the euphonic changes since his day. So we should make place in our instruction in Greek for the large class who will never pursue it beyond college walls, unless by reason of familiarity, not simply with the forms, but with literature of the language, the translation is an easy thing.

The grammar of Prof. Goodwin attempts no novelties. It is essentially of the same character with those of Hadley and Curtius. Its syntax is clear and philosophical. It is chiefly condensed from his "Syntax of the Moods and Tenses of the Greek Verb"—a most excellent work. His system of pronunciation is conservative; steering between the so-called "English system" and the attempt to speak Greek as the Greeks are imagined to have spoken it. He gives chiefly the "continental" sound of the leading vowels *a*, *e*, and *i*, and of the diphthongs.

The work is scholarly, and will be welcomed as an addition to our means of instruction in the language of Homer, Herodotus, Xenophon, and Plato. Its execution is worthy of all praise, reflecting credit alike upon the editor, the publisher, and the printer. W. E. M.

BOISE'S GREEK SYNTAX. "Exercises in some of the more Difficult Principles of the Greek Syntax, with References to the Grammar of Crosby, Curtius, Goodwin, Hadley, Kock, and Kühner." "By JAMES R. BOISE, Ph. D., Professor in the University of Chicago." Chicago: S. C. Griggs & Co.

A former work of Prof. Boise, "First Lessons in Greek", has been received with great acceptance by some of the most eminent teachers in our preparatory schools. That work, intended as an introduction to

the Anabasis, and adapted to Hadley's grammar, has stood the test of successful use. The present work is "intended for the first year in college." Its examples are all taken from the Attic writers. It seems well adapted to the use of the careful teacher, who wishes to give his pupils such competent knowledge of the classic Greek that they will be encouraged to pursue it after leaving school. The order is natural and progressive. Beginning with a brief synopsis of the order of words in an Attic prose sentence, it takes up consecutively the moods and tenses, showing the use and force of each, and dwells fully upon the infinitive, the participle, and the verbal adjective. Five lessons are assigned to interrogative and negative sentences, and three to some of the more important particles. From a somewhat cursory examination, we hail it as a valuable aid to the teacher and the pupil. W. E. M.

HART'S CONSTITUTION OF THE UNITED STATES. For the Use of Schools and Academies. By JOHN S. HART, LL.D. Philadelphia: Eldredge & Brother.

This is in form a catechism of the constitution. A series of well-considered questions calls the attention of the pupil to the subject under consideration. The answers, except to such questions as are explanatory, are in the words of the document itself. Each article, section, and clause is thus made the subject of searching investigation as to its meaning. The intent is, that the whole instrument shall thus be memorized by the pupil in a series of brief and easy lessons. Of the value of this mode of instruction by question and answer, there can be no doubt. It has the seal of experience with the best success.

The work is well done. The table of contents furnishes a full syllabus of the document, and makes reference easy. The Amendments are appended. The book, comprised in one hundred pages, is designed for use in the common schools, and might profitably supplant some of the pretentious "-ologies", which encumber the present curriculum. A knowledge of the Constitution of the United States ought to be an indispensable element in the education of every man. In itself it is the best model the world affords of a fundamental law. A reasonable imitation of its wisdom and its brevity would save us from many of the crudities which constitution-makers are prone to foist upon the fundamental laws of our States. We hail with gladness every effort to instruct our rising citizens in this masterpiece of the wisdom of the Fathers.

W. E. M.

CHURCH'S MUSICAL VISITOR, published by John Church & Co., Cincinnati, contains thirty-two pages monthly, and is filled with a great variety of matter of interest to musical people, including several choice pieces of music which are alone worth much more than the price of the magazine—$1.50 a year. A specimen copy will be sent *free* on application to the publisher.

SCRIBNER'S MONTHLY has already attained the highest rank among both English and American magazines, and it is growing better and more attractive every month. Each number is a fresh astonishment.

——THE attention of those in want of Bells for Churches, Schools, etc., is called to the advertisement of Vanduzen & Tift, of Cincinnati, Ohio. Full descriptive catalogues, with prices, etc., will be sent free on application to them.

NEW BOOKS RECEIVED.

OUTLINES OF THE WORLD'S HISTORY: Ancient, Mediæval, and Modern. By William Swinton. New York and Chicago: Ivison, Blakeman, Taylor & Co,

THE COMPLETE ALGEBRA. Robinson's Shorter Course. By Joseph Ficklin, Ph. D., Professor of Mathematics in the Universty of Missouri. New York and Chicago: Ivison, Blakeman, Taylor & Co.

OLNEY'S INTRODUCTION TO ALGEBRA. By Edward Olney, Professor of Mathematics in the University of Michigan. New York: Sheldon & Co.

ENGLISH GRAMMAR: An Advanced Course of Lessons in Language, By Mary V. Lee and Hiram Hadley. Chicago: Hadley Brothers.

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THE

NATIONAL TEACHER:

A MONTHLY EDUCATIONAL JOURNAL.

Vol. IV. NOVEMBER, 1874. No. 11.

CLASS INTERVALS IN GRADED GRAMMAR SCHOOLS.

MR. WHITE: Adverse circumstances, to my great regret, prevented me from attending the session of the National Teachers' Association lately held at Detroit. Had I been present, no portion of the exercises, I think, would have interested me more than your own paper on "Several Problems in Graded School Management", which you presented in full to your readers last month. For not only did you handle the subject in an intelligent and attractive as well as practical manner, but the subject itself is of surpassing importance. I have felt for several years past,—ever since the primary department of our public school system had been thoroughly renovated, and sensible methods of teaching substituted for the abominations which once prevailed,—that the best service which a live educator can perform in behalf of our American youth, provided he be so situated as to be able to work in the matter to advantage, is to try experiments in graded grammar schools in order to render himself thoroughly conversant with their defects and become as thoroughly posted regarding the best means of remedying them. The schools everywhere are waiting impatiently for just such experiments and just such testimony.

You did not profess to be exhaustive in your paper. You undertook only to open the subject fairly out to observation, and invited discussion on your several points.

Discussion ensued. How far it answered your wishes, in its breadth and thoroughness, the meagre reports which have

come under my notice have given me no idea. But seeing the name of Supt. Harris, of St. Louis, among those who engaged in the discussion, and that he warmly favored the formation of classes to be graded only a few weeks apart, with correspondingly frequent promotions, as a specific for the most serious of the evils of which you had complained, I am interested to give you some results of my own thought and experience in the same direction.

Two years ago, at the session of the National Teachers' Association, which then met in Boston, Mr. Harris read a paper on "The early withdrawal of pupils from school; its causes and remedies." He attributed the multiplicity of early withdrawals chiefly to the inexorable rigidity of the prevalent system of gradation, and the long interval (a year) between the stated periods of promotion. The effect of this, he said, in causing withdrawals from school, is "truly frightful." You yourself seem to hold very much the same conviction. For you say in your Detroit paper, that "the universal experience of graded schools condemns the prevalent practice of promoting pupils but once a year, with a year's interval between the classes. This wide interval is a serious obstacle in the way of a needed reclassification of pupils. The more capable pupils can not be transferred to a higher class, since this obliges them to go over the ground of two years in one—a task successfully performed by very few pupils—and the less advanced pupils can not be put back into a lower class without serious loss in time and ambition, *if they are not withdrawn from school.*"

What is the real measure of these difficulties? No doubt such evils exist. No doubt, in many localities, there is periodically a "putting up" and "putting down" which occasion disappointments and heartburnings, and result in numerical losses. But are these results the inevitable consequents of the class intervals, or are they products of an artificial standard of scholarship and progression, which would multiply difficulties around whatever system of classification might be adopted? I shall endeavor to answer this question.

When I listened to Mr. Harris in Boston, and heard him elaborate a cure-all system making provision for some five weeks only as the interval between the classes, it struck me at once that the evils inseparable from such a system must far overbalance the advantages it would secure. But Mr. Harris held position among our foremost educators. He was distin-

guished for profundity of thought and philosophical sagacity and acumen. A proposition emanating from such a man claimed for itself the most careful attention. Such attention I have endeavored to give it. I have tested it, positively and negatively, by every means short of the radical overturn in our school affairs which its actual adoption would necessitate. And while he seems to cling to it still with all his original confidence, and to have practically instituted it, to a greater or less extent, in St. Louis, I, in my narrower sphere, have been steadily driven away from it more and more, until it seems to me that I would sooner resign my position than have the charge and responsibility of schools organized on what seems to me so vicious a basis. And I hope it will be thought by some others as well as myself, worth my while to give some results of my observation and experience in the premises.

In the *Penn Normal Monthly*, a few months ago, Mr. Harris systematically formulated his views, indicating a school *quarter* (10 weeks) as the most judicious interval to maintain between the classes of a graded school; on the lapse of which period, a reorganization should take place. I adopt this interval, therefore, as the basis of my criticism.

First, I will discuss the effect of such frequent changes of the *personnel* of a class in its intellectual state and progress. They seem to me calculated utterly to destroy those conditions which are essential to sound, thorough, healthful work.

What teacher is there who can meet and measure a scholar's intellect off hand, so as to penetrate its depths, detect its idiosyncrasies, trace out its favorite channels of action, and do it justice? What scholar, moreover, can instantly understand a teacher—truthfully interpret her ways and her modes of speech, and accurately comprehend her wishes and commands? What expert does not know that whenever a new teacher is put over a class, there is an inevitable loss before the two become fairly adjusted to each other,—before they are brought into cordial *rapport*, so that the best kind of instruction can be possible? What expert does not know, indeed, that the consequences of these novel relations are often of a specially damaging character; that they amount to the actual demoralization of a class? And these peculiar relations between teacher and scholar, with their inevitable losses and their possible evils of a far more injurious character, are to become normal incidents in school

affairs—are to occur systematically, with the majority of the scholars, four several times a year!

At the opening of the present school year in September, one of my grammar masters reported that he must "put down" eight scholars of a certain grade in his school, as they could not advantageously maintain themselves in that grade. *Eight* out of a total of *sixty-six*—it was much beyond our usual per cent of incompetents, and I was disturbed. "What does this mean?" I asked. "Why, you know well", was the reply, "that the two classes of that grade have had repeated changes of teachers during the past year, and one of them has been subjected to such changes *no less than four or five times!* The whole class has suffered badly therefrom." I accepted the explanation: I thought it ample; and the bearing of this incident on the subject before us is specially significant.

No doubt when such a condition of things is thoroughly methodized, and the teachers understand that they will be expected to place the fresh increment of their classes, from time to time, in the full harness of work at a dash, they will put forth exertions corresponding to the demand and a certain kind of intellectual discipline be quite readily enforced. But at best the instruction under such circumstances will inevitably be superficial, temporizing, and incomplete. It is truthfully urged against our graded system, that it tends to lose sight of and repress all individuality in the scholars; so that peculiarities of genius and talent obtain no scope. And no method could be devised better calculated to make the iron yoke of system harmfully repressive and galling, than one which renders a clear insight to the secrets and specialties of mind and character, and modifications of guidance to correspond, partially, if not wholly, impossible.

Again, I call attention to the fact that by this system of classification a considerable portion of the scholars of every class is changed *four times a year.* Four several times two divisions are brought together, with a positive difference existing between their several attainments, and they are expected to be forthwith amalgamated, and carried forward successfully as one. By what hocus-pocus this is to be brought about, without either dropping the more advanced division to the level of the less advanced, or lifting the latter, by a single hoist, above the gap of culture that intervenes between the two—to the manifest loss and injury of both—I can not conceive.

It is urged that more frequent reclassifications than now prevail are necessary, because there are always scholars, who, for various reasons, must be put down—not being able to keep up with their classmates—and to drop them a whole year is too much. And lo! the remedial system provides for making a diversity of attainments, normal and chronic! If this diversity is of so small account, why make complaint of it when it occurs, in individual instances, under the old regime? Why not let the derelicts continue in their accustomed places, and work along just the same?

Again, in this connection, what good teacher is there whose instructions do not include methods and processes, whose objects can not be consummated in a period of limited extent, but which, through carefully arranged steps of progress, a little to-day and more to-morrow, all connected and cumulative, finally round out into full intellectual or moral results? From the nature of the case, what is there worth the name of *education* which is not dependent at all times, in various important particulars, on study thus distributed along a succession of interdependent stages? And if the teacher has no scope for serial work which will cover more than a few weeks, what a subtraction occurs of some of the finest elements of instruction! What a premium we have on fragmentary, time-serving, surface work!

I will next turn the attention of the reader to the malign influence of short intervals between classes and a correspondingly frequent change of teachers over the *moral* training of the scholars. If such arrangements be prejudicial to intellectual progress, how much more so to that moral culture which is vitally dependent on a thorough knowledge of the character and its impulses? What a sacred word DISCIPLINE becomes in connection with school affairs, when, from the long, intimate, sympathetic intercourse of a teacher with her scholars, opening out to her intelligent appreciation their secret springs of action, she is enabled to be wisely discriminating in her estimates of character and thoroughly just in her judgments; and what a contemptible misnomer it is, as a symbol for anything high toned and healthfully effective, when it represents only the compassing of orderly behavior, and those snap-judgments —so injurious to true moral influence—which result from the lack of opportunity to fathom the depths of a scholar's character!

How slight, moreover, the personal influence of the teacher when connected for so short a period with her scholars! Her personal influence—that mightiest and most persuasive of all the moral forces astir in a schoolroom, when the conditions are such that her character has a sufficient field to display its realities and assert its power! — What temporizing safeguards and correctives can compensate for the privation of that?

Mr. Harris appreciates the force of this last position. Yet he argues that "the school should not be a *family* influence exclusively. It is the transition to civil society; consequently the pupil must change teachers often enough to correct any one-sided tendencies of social culture that he may be liable to acquire from the individual teacher.,'

Very wise reasoning in relation to scholars old enough to judge with some sagacity and correctness respecting the character of a teacher and its tendencies, and rescue themselves from any damaging bias. But in relation to scholars so young as to be properly in mental and moral leading strings, let the good old statutory declaration that the teacher stands *in loco parentis* remain in full application and efficiency; and the introduction of the callow youth to civil society be postponed. And who will say that the scholars of our elementary schools are capable of profiting by a release from family constraints—with the exception, perhaps, of those who have reached the topmost grade! H. F. H.

[*To be concluded next month.*]

THE BOOK QUESTION.

There is a growing conviction in the minds of those who give most thought to educational matters, that more should be done to call the attention of pupils to *things*. Books are so abundant and so cheap; they are so entertaining in matter, and so beautiful in mechanical execution, that there is real cause of alarm, lest, relying solely upon them as *the* educational means, our children grow up mere quoters of the opinions of men, with neither impulse nor ability to see or judge for themselves. There is no question that the constantly increasing tendency toward an absorbing devotion to text-books in school, and to library books and periodicals out of school, is to stultify

thought and repress investigation. "The book says so" becomes, to our young people, the end of all search for truth. So patent is this, that the induction might pass into a proverb, "Children who read most, think least."

And for this reason: Reading implies only the receiving attitude of mind, and in mind, as in physics, *the condition of receptivity is a restful* one. There is only that degree of mental excitement in following through a well presented statement of fact, seasoned with incident and illustration, which is thoroughly grateful and soothing. "Man is a lazy animal," and if the beneficent public would shelter, feed and clothe him, he would contentedly sit and let it be done. Likewise, if the public will bring all science and philosophy into his study, not only served in the most charming fashion, but hashed so fine that he is relieved of the rather laborious process of mastication, be assured he will be quite as prone to lay back in his easy chair, and unquestioningly swallow the free collation.

But more vigorous work must be done to secure the mental stimulus and tone which is essential to growth and productive effort. Rather than this extreme of passive reliance upon authority, we had better have the other, the absence of all text-books from our schools. Let the schools be places sacred to the investigation of *things*, and make *books* the recreation, when real work is done.

But here, as elsewhere, the *best* lies between the extremes. Books are not necessarily stultifiers of thought nor the enemies of investigation. The evils incident to them are the result of their exclusive use and their misuse. These must be corrected by the increasing professional wisdom of teachers and school officers. They must understand more clearly the province of a book. Books are but accumulations of words. Words are marks or signs of ideas, and, as such, have an inestimable value. Words, as the marks of ideas, are the representatives of knowledge; and books which contain them become the invaluable depositories of the world's accumulating thought. But words are not ideas; they are only the *symbols* of ideas. Language is not knowledge, but the *representative* of it. Labels have [only] a value of convenience, which depends upon the intrinsic value of what they point out. Now there is a constant and insidious tendency to invert these relations—to exalt the truth above its contents, the tools above their work, the label above its object, words the things for which they stand.

The *means* of culture thus become the *ends* of culture, and education is emptied of its substantial purpose."*

Such language as the preceding must not only receive the assent of the head, but its truth must be transformed into a conviction of the heart, and the moral sense must recognize a professional duty growing out of it. The *true* and the *false* must become in the strongest sense the *right* and the *wrong.* Then will arise an earnest practical protest against this rapidly growing evil of *trust in words*, which will avail something.

When the reaction really comes, it will be in favor of a philosophical union of all that is best in the use of books, with the best features of objective teaching. Text-books are now (it is humiliating to confess it) the defences behind which teachers plant themselves to cover their lack of preparation for their work. The argument most fatal to any pressure of the claims of an objective course of study is the incompetency of teachers. Oral instruction is declared to be impracticable because teachers have not the requisite knowledge to prepare, nor ability profitably to present lessons. It ought to be accepted as a professional maxim, that "*the teacher who is not able to teach without the text-book, is not fit to teach with one.*"

Moreover, the way to secure better work is not to accommodate our convictions of what should be done to the agents we have for doing it, but unhesitatingly to lift the standard of professional demand toward our ideal. The supply will never *precede* the demand; it, however, invariably *follows.* The feeblest teacher is conscious that he can do better than he is doing. That authority becomes his benefactor that demands his utmost endeavor. And if some of the profession fall out, what then? Those who have not the energy to win success from temporary failure are not worth regretting. That man is an enemy to the best interests of our profession, who would lower the standard of philosophical teaching by a hair's breadth, to accommodate the stature of any in it. As it becomes a broader field, and demands more talent, much that goes in other directions will come to us. We can well afford to lose some regiments at the lower extreme, if by exalting our work we secure as many at the upper one.

Cincinnati, Ohio. DELIA A. LATHROP.

* Miss Youmans—"The Educational Claims of Botany".

SOME POINTS FOR YOUNG TEACHERS.

(*Preliminary Drill on Outlining.*)

First. Explain to the pupils that *outlining* is an aid to thought and investigation. Particularly is it a help in composition-writing.

Second. Illustrate this by taking some simple subject, and *outlining* it with the aid of the class.

Third. For instance, take the subject, *Table.* A composition is to be written. We do not know what to say about it, so, to help us, let us *outline* it.

Fourth. Every subject that is to be written upon may be considered (1) with regard to its structure, or its *Parts*, and (2) with regard to its *Classes* or its *kinds.*

Fifth. This gives us two steps in this outline, thus:

TABLE.
Parts.
Classes.

Sixth. *Parts* and *Classes*, we say, are *coördinate* with each other, because they are of the *same rank* under the one head, *Table.*

Seventh. *Parts* and *Classes* are *subordinate* to *Table*, because they are subheads under it.

Eighth. Now let us subdivide *Parts.* The parts of an ordinary table are: Top, Drawers, and Legs. These will be subheads, or subordinates to *Parts.* But in arranging them under *Parts*, in the outline, we must place them according to our idea. For instance, we must mention them from the top down, thus: Top, Drawers, Legs; or from the bottom up, thus: Legs, Drawers, Top; but never begin at the bottom, then skip to the top, then to any other part, thus: Legs, Top, Drawers.

Ninth. Our outline now stands thus:

TABLE.
- Parts.
  - Top.
  - Drawers.
  - Legs.
- Classes.

Tenth. Observe that *coördinates* are placed vertically, while a *subordinate* is placed underneath and to the *right* of the *head* to which it is subordinate. That is, *Parts* and *Classes* are *subordinate to Table*, hence they are placed underneath it and to the right; but *Parts* and *Classes* are *coördinate*, or *Classes* is *coördinate*

with the term *Parts*, hence it is placed vertically under it, room being given for the subheads of *Parts*. Top, Drawers, and Legs being coördinates, are placed vertically, but being all subordinate to *Parts*, are placed underneath it and to the right.

Eleventh. Let us now subdivide *Classes*, which means *kinds*. There are many *kinds* of tables—kitchen table, writing table, marble-top table, walnut table, billiard table, centre table, large table, heavy table, painted table, etc. But as we arranged the Parts according to some *idea* or *principle*, so we must these many different *Classes*. If I ask for different kinds or *classes* of tables *as to use*, you will mention kitchen table, card table, billiard tables, etc.; or if you group them with reference to the *material* of which they are made, you would mention walnut, marble-top, oak, etc., and so on. Now in our outline we *group* them or arrange them according to a principle.

Twelfth. Our outline will then stand thus:

TABLE.

- Parts.
  - Top.
  - Drawers.
  - Legs.
- Classes.
  - As to use.
    - Kitchen.
    - Card.
    - Centre.
    - Billiard.
    - Etc.
  - As to form.
    - Round.
    - Oval.
    - Rectangular.
    - Square.
  - As to material.
    - Walnut.
    - Oaken.
    - Pine.
    - Etc.

Thirteenth. In this manner the *Classes* may be extended indefinitely. Enough has been presented to give you the idea of outlining, both as to the method and the *mechanical arrangement*. I will continue the subject in my next "Points". You see that if something is said upon all the *heads* in this *outline* a quite lengthy composition would be the result. Any theme may be treated in the same manner, and so abundant material for a composition be *tracked up*.

N. N. School, Lebanon, O. R. H. HOLBROOK.

HINTS FOR YOUNG TEACHERS.

PRELIMINARY WORK.

As soon as your school is engaged set about making the *special* preparation necessary for that particular school. Get all the information you can about its present condition and its past history. When you engage the school get all the facts you can from the directors, and write them down that you may not forget them. Find out who taught the school the preceding term or two. Write to him or go and see him, even if you have to go a good many miles. He can give you much information that will be a great help to you.

Ascertain what studies are pursued, what text-books are used, what rules and regulations the school has been accustomed to, who the good scholars, and who the hard cases are, what punishments have been inflicted, what quarrels there are in the district, and what families take most interest in the school. Ascertain these and other facts, and *prepare accordingly.* The more you know about your district and school when you enter them, the better you will succeed.

Study out a general plan of operations, leaving it open to such changes as you find necessary after you begin school. If possible visit in the district a day or two before your school begins. Parents and children will be glad to see their new teacher, and it will take away something of the awkwardness of going before a room full of strange children the first day. It will give the parents an opportunity to tell you many things about their children which they are often anxious to have the teacher know before school begins. Remember all you can of what they say and make the best possible use of it.

If you go to no other place be sure to visit the schoolroom, that you may get the *lay* of things, decide where to have your classes, etc. If the directors have not done their duty in cleaning the room, putting in glass, and making other repairs, speak to them at once about it, and tell them it *must be done* before you commence school. Give them no rest until it is done. Thorough attention to all these apparently trifling things will make your success more certain.

Make the best preparation in your power, and then do not worry or be filled with anxious thought about your school, but

ask for wisdom of Him who has promised to give it liberally to those who need and ask for it. You certainly need it, if any one does.

Hamilton, N. Y. R. T. CROSS.

THEORY *VS.* PRACTICE.

The writer of this has been for some years connected with and deeply interested in school matters, as teacher and school officer—(he even in his zeal once had the temerity to publish a school journal)—and hence, having given the subject considerable attention, feels himself in some measure, at least, qualified to express an opinion concerning the present status and future prospects of the school question. He has been reading the OHIO EDUCATIONAL MONTHLY, a publication quite as good as any of its class, which should be read by every teacher in the state, as well as by a numerous other class of people who will presently be referred to.

Experience and observation teach that in our schools the theory is better than the practice. Reading the school journals we find a world of theory, which very few teachers are competent or qualified to carry out in practice. Again, there is too much red tape in our schools. Too much endeavor to force teachers and scholars to work by certain arbitrary rules—too little left to the judgment of the teacher.

It is no small matter to be a successful teacher or trainer of young minds, either as teacher in the schoolroom or as a parent in the family. No wonder then that in both there are so many lamentable failures. Comparatively few men or women are fitted for either position.

Again, as in the family the united efforts of both parents, male and female, are required to rear the child, so it is argued that neither male nor female teachers alone and exclusively are sufficient to educate a mixed school. That is a lop-sided sort of training given by either one alone. Men may teach boys, and women girls, but not *vice versa*, or be successful in the mixed schools now so common and popular.

So long as politicians rule the schools, but little improvement can be looked for. It is questionable whether, on the whole, our educational facilities have much improved under

our modern schoo' systems. True, we have much more showy schools—much more "fuss and feathers"—complicated and expensive machinery, but the practical results are not commensurate therewith.

Many teachers who might teach successfully, if left to themselves and their own methods, are made useless by the effort to force them to teach according to other methods prescribed by red tape. Many pupils are discouraged by being restrained, "cribbed, cabined, and confined", by the arbitrary class arrangements and systems of promotion practiced in many places. Teachers and scholars are turned into mere machines.

And now a word as to the coeducation of the sexes. This may be well enough in the lowest grade of primary schools, with pupils not more than ten years of age; but with older pupils, and in more advanced schools, doubtful. A writer in the August number of the TEACHER, though apparently favoring the coeducation of the sexes, nevertheless cites a very strong reason against it, and one seldom alluded to. This will be found on page 274 of the August number, in the ninth and tenth lines from the top. It is not contended that girls have less capacity to learn than boys, but that their education should in some respects differ. It is a queer sort of theory, indeed, that we hear advocated by many in these days of women's rights, that our girls should take the same course as the boys, and pass through our colleges with all the honors of mathematics and the dead languages, get their diplomas, practice in the professions, hold offices, and all that sort of thing! Who, we ask, under this system are we, by and by, to look to for our mothers and housekeepers? There is a vast amount of theory in such a proposition, truly, but very little that will work well in the long run in practice! We hardly imagine it will work well in practice, if the commandment to "increase and multiply" is to be observed, for our women to occupy public positions. Their occasional necessary retirement from such public duties might be very inconvenient and annoying unless they had male assistants; so, upon the whole it may do just as well to let well enough alone. Leave the women to adorn our homes, and to govern the world, as they have ever done, by their silent influence. Educate the girls to be women, and the boys to be men. Less theory and more practical practice.

Bridgeport, Ohio. E. S. Z.

EDUCATION IN RICHMOND, VA.

As I have said, our city free schools reopen to-day, and they well deserve more than a mere mention. The system was inaugurated here long before the state system was instituted, and the city generously provided education for children of both colors, when no law existed to compel such provision. The city now owns ten fine brick schoolhouses, and occupies eight others, having a total of one hundred and seven schoolrooms. The school property of the city is valued at $222,000. During the past year, ending August 31, 1874, the school expenditures here amounted to $82,538.53, of which $50,542.90 was paid to officers, principals, and teachers, $18,496.71 for real estate, buildings, and repairs, and $13,498.92 for miscellaneous expenses. Of the receipts thus expended, $18,086 was from the state, $2,000 from the Peabody Fund, and the remainder ($62,452.53) was appropriated by the city council.

During the past year these city schools taught 4,959 pupils, of which 3,041 were white, and 1,918 were colored. Most of the teachers are white ladies, but there are three colored male teachers and seven colored female teachers. The percentage of each color to population is about the same, but many white children are sent to private schools. There would be more colored scholars, but their parents are generally very poor, and have to make them contribute in many cases to the support of the family, either by assisting at home, or by work in the tobacco factories.

The terms upon which scholars of both colors are admitted to the benefits of the city schools are here set forth in an extract from a public notice published by the superintendent, J. H. Binford, Esq.:

"First—The father or male guardian of children must forward to the teacher the capitation tax receipts, both city and state for the current year, before children can be admitted in the public schools as scholars.

"Second—Teachers may register and admit scholars in their respective schools up to the 1st of January next; provided the receipts for one-half the city capitation tax for 1874 be presented; but teachers shall require the receipt for the other half of the city capitation tax on January 1, 1875. Receipts for the full amount of tax shall be required from all scholars entered on and after the 1st of January, 1875.

"Third—Receipts for the state capitation tax may be presented as late as the 1st of November following the opening of schools. Teachers

shall require the state receipts to be presented on and after that date from all scholars retained in the public schools.

"Fourth—Teachers shall, before returning receipts, have them canceled by the principal, and shall keep a record of the same, and report delinquents to the principal of the schools, who shall report to the superintendent of schools. Teachers shall not admit scholars to the schools on canceled receipts.

"Fifth—Children who are permanent residents of the city of Richmond, and have no father or male guardian, shall be admitted as scholars into the public schools, and be exempt from the above requirements."

Our schools have been frequently visited by distinguished educators from other states and countries, and they have all concurred in pronouncing our system admirable and its administration excellent. We are proud of it, and nothing could cause us to abandon it but the enforcement of mixed schools under the Civil Rights Bill.—*Cor. Cin. Commercial of Sept. 21st.*

—— ALL that I urge for Reading, as a means for increasing the mental store, applies with equal force to the revival of the almost forgotten practice of committing to memory prose and verse. The schools where the practice exists are few and far between, and in most of them it is done by a preference of the teacher, rather than as part of a plan. At the same time the custom of learning Bible verses and hymns at home has in great measure died out, so that the number of persons who could repeat from memory for over half an hour grows smaller and smaller. What we lost as an educating power when we gave up the assiduous study of the Bible, will be an interesting question for the writer of the culture-history of this half of the century. It may not be our province to revive the habit, but it is our duty to see that the other practice of learning hymns or poetry does not die with it.

While the choice must always be of the best, making sure of the pure gold, it must be suited to the capacity of the child. It is quite as needful to take care to keep the lesson up to the child's power as to keep from going beyond it; in fact, unless failure meets harsh penalties, I think a child would be less harmed by having such a poem as Gray's "Elegy" given it when too young, than to let a girl of twelve learn "The Owl and the Pussy Cat" or "The Hen that Hatched Ducks."—*Mrs. A. C. Martin.*

EDITORIAL DEPARTMENT.

—— We call special attention to the opening article in this number on Class Intervals, by Supt. Harrington, of New Bedford, Mass.. Mr. Harrington is one of the clearest thinkers and ablest writers in the profession, and we know that he has given very earnest thought to this subject. We regret that the great length of his paper has necessitated its division. We defer comments until next month, when the concluding portion will be published. There is a very noticeable current in favor of the adoption of a shorter class interval than a year. In his late inaugural at Put-in Bay, Supt. De Wolf, of Toledo, strongly advocated the promotion of pupils twice a year. Supt. Hancock, then of Cincinnati, took a similar position in his report for 1873. In his last report, Supt. Pickard, of Chicago, states that the "mobility" of the school system of that city, is secured by frequent promotions in the lower grades. But the leader of this movement among superintendents is Dr. Harris, of St. Louis, who advocates an interval of ten weeks, and the city schools are practically solving the problem. The semi-annual system prevails in many of the cities and towns of the East.

—— The writer heard many complaints at the summer associations by teachers in charge of higher schools, located in cities and towns where the lower schools are entirely under the charge of women, that the pupils do not show that kind of discipline and that respect for teachers and themselves which they have a right to expect. Is the real cause of this the one implied? or are we as teachers losing sight of this most essential part of education in our school work? The complaint demands our serious consideration as educators. E. H. C.

—— He who secures obedience through the instrumentality of blows, is but a mechanic among educators; a sort of blacksmith, who forms his plastic iron shoes. He who, through personal power, induces ready submission and discipleship, is a professor, and his calling is a profession. He who applies incentives directly to the springs of action, inducing a love of high things, raises his calling into the region of art, high art—the highest.

—— The *Popular Science Monthly* for October quotes part of a letter from Prof. Huxley to the *London Times*, in which that distinguished scientist expresses some views on the subject of woman's capacity for education as follows: "Without seeing any reason to believe that women are, on the average, so strong physically, intellectually, or morally, as men, I can not shut my eyes to the obvious fact that many

women are much better endowed in all these respects, and I am at a loss to understand on what grounds of justice or public policy a career which is open to the weakest and most foolish of the male sex should be forcibly closed to women of vigor and capacity." The career here referred to, is that of the medical practitioner.

—— In revising courses of study for our public schools there seems to be a growing tendency to increase the number of studies, and a purpose to have quite a number of them pursued at the same time, either by having short recitations in several on the same day or a part of them on alternate days. Are either of these plans wise or beneficial to the great masses of our children? Pursuing such a course must they not lose that discipline which comes from regular and continuous work upon any given subject? I am not prepared to say that we should have less studies in the entire course, but would raise the question whether or not they could be so arranged that part of them could be studied continuously for a given portion of the school course, and afterward others in the same way. Would not the pupil gain more both in discipline of mind and in the acquisition of facts by such a plan, than by attempting more than can be mastered by the average minds of children, as is often done?

E. H. C.

—— A lady teacher of much experience in the lower grades of both public and private schools, now employed in a well-known academy in this state, after having visited the public schools of Chicago, reports very favorably of the condition of educational matters in that progressive city. She was particularly pleased with the good discipline in the lower grades of the schools,—good discipline secured without the whip, even as a last resort. The writer of this has heard of more than one primary school in Ohio, in which from one to six pupils are made to pass under the rod every day, "and yet they are not happy", nor obedient. Is it not about time to supersede the threshing-machine by the rational governor in the A-B-C classes? "Punishment", says Jean Paul, "should only apply to a guilty conscience, and in the beginning children, like animals, have only an innocent one. They, as the fixed stars viewed from mountains, should never tremble; and the earth should seem to them, as it would do from a star, glorious, shining, not earthy black." But we know well enough that the threshing-machine cares very little for what Jean Paul or any body else may say.

—— The interest in scientific matters, now at flood-tide in the world of scholars, is rapidly spreading among teachers of the better sort, and begins to produce some good practical results in schools of all grades. Text-books in the various sciences are multiplying with a rapidity that indicates a growing demand for their use. Marvelous improvements are taking place in methods of studying nature. The teacher's institutes,

always sensitive to changes in the educational atmosphere, and usually ready to encourage any movement that promises to benefit the great cause for which they exist, are widening the circle of their usefulness, by placing upon their list of subjects of instruction, such branches as chemistry, physics, and geology. We notice with pleasure that Prof. T. C. Mendenhall, of Columbus, created and sustained a very lively interest by a series of experimental lectures delivered at Cincinnati and other points during the institute season just passed. There is no doubt that the introduction into the country schools of science-teaching will be productive of the most beneficial results; and the fact that the institutes recognize its importance is a very certain indication that it will soon receive that share of attention which it justly deserves.

——THERE is an interesting editorial in the October number of the *Popular Science Monthly*, giving deductions from some experiments conducted with the design of ascertaining the comparative educability of children of different races. These experiments did not indicate that difference of race implies difference of natural capacity; but they strikingly illustrated a general fact of great significance,—the fact that the progress of a pupil at school is measured by the culture maintained in the family in which the pupil dwells. Intelligent homes make successful schools. The youth who lives in an atmosphere of thought and refinement, who hears instructive conversation at the fireside, and is accustomed to the use of books from his earliest years, how great is his advantage over a classmate, who, though of equal native power, has not enjoyed the benefit of home culture and intellectual stimulation. What teacher has not observed the marked progress which the children of educated parents are apt to make in advance of children of ignorant parents? In view of the difference here considered, a question might be raised as to the justice of testing all classes of pupils, irrespective of home advantages or disadvantages, by competitive examinations based upon school work alone. Is it fair to demand of the boy whose home influences are antagonistic to study, the proficiency of the boy whose home is another school?

——AT the late Put-in Bay meeting, Supt. De Wolf, of Toledo, ably advocated the reading and memorizing of the "English Classics" by children. He spoke strongly of the value of storing the child's memory when young with the best specimens of literature. The same idea was more elaborately advocated in the paper of Mrs. A. C. Martin, of Boston, read before the National Teachers' Association at Detroit. She urged the abridgment of some subjects of the present course to make room for English history and English literature, to be taught not in a formal, but in a life-awakening manner. She said that no child should spend a month in school without committing something to memory worthy of remembering. Instead of requiring pupils to commit present works on geography and history, she would exercise their memory on the best

productions of English authors. We give two paragraphs from her admirable paper in another place. We earnestly commend this suggestion to the attention of teachers.

—— It is with great interest and pleasure that we have watched the growth of the public mind in regard to art culture as adapted to the industries of our great country. This growth has been the result of necessity and economy, rather than a love for its promotion. The latest "Circular of Information" from the Bureau of Education at Washington, prepared by Mr. I. E. Clark, of the Bureau, is devoted to the discussion of drawing in our public schools, and the relation of art to education. An examination into the industries of the country has developed the fact that we are relying almost entirely upon foreign artisans for designs and details. In other countries special attention has been given to this subject. In Great Britain the great growth of art education for the last twenty years is indicated by the following statement, copied from a recent speech of Mr. Cole of the South Kensington Museum:

"In 1852 there were only 20 art schools, with 5,000 students, paying £2,600 in fees. Now there are 122 schools, with 22,800 students, paying £24,800 a year in fees. There was then no teaching in schools for the poor; now 194,500 children are taught drawing. There were then no night classes for artisans; now there are 538 classes, with 17,200 students. In 1872 the South Kensington Museum was visited by upward of 1,156,000 persons. Its art library was used by 19,750 students, and its educational library by 15,360 persons—clergymen, teachers, and others interested in elementary education—coming from all parts of the country to consult it. The Museum had circulated, without accident, through local exhibitions, upward of 5,400 paintings, objects, diagrams, etc., which were visited by more than 604,000 persons. It has lent to local schools of art for study upward of 1,300 objects, and 2,100 books, prints, etc., relating to fine arts."

E. H. C.

—— We have received a pamphlet of eighteen pages, entitled "What does the Bible represent in the American Common School", by Dr. A. D. Mayo, now of Springfield, Mass. The doctor, who is never so happy as when in a fight, combats with his usual vigor and enthusiasm "The Catholic priesthood and the secular philosophers."

THE CATHOLIC CHURCH AND THE COMMON SCHOOLS.

The recent withdrawal from the public schools of Cincinnati of a large number of Catholic children, by their parents, and evidently at the incitement of the Romish church, again calls popular attention to the general subject of the relation of the free schools to their sectarian enemies. Again the friends of the American common school system are called upon to define and defend an institution which they regard as lying at the basis of our very government and civilization. While minor differences of opinion exist respecting some of the functions of the public school, and also respecting its methods of operation, the great majority of the people hold essentially the same views in regard to the nature and utility of the school system. The great majority of the people habitually regard that system as the highest civil blessing the

nation enjoys. They would almost as soon think of abandoning the republican form of government as their cherished scheme of popular, free education.

The system is American, and will continue to be so, as long as American ideas continue to rule, and that is likely to be until the nation expires. For, to borrow from Emerson, as the Mississippi river keeps its character throughout its whole course, though many other streams mingle with it, so the primary current of nationality that took its rise in New England long before the Revolutionary War, remains *sui generis*, and gives its characteristics to every tributary. By saying that the school-system is peculiarly American, we do not mean to intimate that it is therefore the best in the world, or that it is not. But being American it is dear to Americans, and will be sustained against all opposition. Being democratic it naturally comes in antagonism to all that is aristocratic or despotic. Ecclesiastical powers like the Church of Rome are necessarily despotic, as their very existence depends upon the submission of the many to the dogmatic dictation of the few. The Romish Church is friendly to republicanism only in so far as it can use the freedom republicanism gives to enforce the moral servitude Catholicism requires. It tolerates any *form* of government, so long as the state is obedient to the church, or is not openly disobedient.

There can never be a reconciliation between the kind of education that the spirit of our country demands in the public schools, and the kind of education that the Catholic priests impart in their private schools. The proof of this will be found by visiting one of the Catholic schools, or even by examining the text-books used in them. Indeed, no proof is asked for. The Catholics plainly enough manifest their disapproval of the public schools by the act of taking their children out of them.

We may consider it very unfortunate for the cause of education in general, very unfortunate for the children who are deprived of better privileges for worse in being obliged to change their school, and seriously obstructive to the progress of modern civilization, that the breach between the Catholic church and the public schools is widening. Of course we assume here that the idea of culture, which is at the center of American education, is infinitely better than that which controls in the Catholic schools. Whatever may be our views on this, the very liberty which we claim for our favorite system, makes it inconsistent for us to condemn the Catholic for following his own wishes. That is his business. We would not so far imitate the animus of Romanism as to hint that any man should be compelled to educate his children in a way contrary to his judgment and conscience.

But we would concede no privilege of dividing the school fund for the special convenience of any sect, either Catholic or Protestant, Christian or Pagan; and if it should appear that the general withdrawal of Catholic children from the public schools is but a preliminary step toward demanding a division of the public funds, then will it behoove the friends of free, secular education, to array themselves for a vigorous skirmish, or possibly a regular battle with no contemptible enemy.

Dr. Mayo, in his last discussion of the question, "What Does the Bible Represent in the American Common School?" pointedly says of the Catholic priesthood: "It makes one demand only: the division of the school fund. To it the use of the Bible is only one incident in a general heresy, etc." This is very true, and may be exemplified by the position taken by Catholics in the debate on the division of the school fund, by the Friends of Inquiry, at Cincinnati, last month. It was frequently asserted, while the subject of the Bible in the public schools was under consideration by the school board, and afterward in court, that, were the reading of this book prohibited in the schools, the Catholics could urge no logical reason for wishing to divide the fund. This assertion, as events show, was deceptive. The Catholics are no better satisfied now that the reading of the Bible is discontinued than they were before. They boldly assume that the whole spirit and tenor of the "general morality" inculcated by the public school, is at least negatively injurious to their children. They regard religious instruction as the prime requisite of elementary education—religious instruction of the kind sanctioned by the Mother Church,—and they demand a division of the school fund on the plea that conscience requires them to bestow such instruction on their children. The question is open for discussion.

EDUCATION AND BUSINESS.

Mr. Hancock's forcible paper on "The High School Question", read before the State Association at Put-in Bay, incidentally raises the query whether education unfits youths for the duties of a practical business life, or not. It has been the custom for mercantile men of a certain class, to decry collegiate and even academical training, as destructive of the qualities that make good business men. We have frequently been told that no amount of book-knowledge can take the place of early and long-continued practice in the routine of the store, the counting-room, and the merchant's exchange. This opinion, however, is by no means universal, though it seems quite general in towns and cities. A lawyer of large experience and shrewd judgment, remarked to the writer, that, in his belief, even a majority of so-called business men succeed or fail, by chance, and not in accordance with any definite system of proceeding; that they make no study of the principles of commerce; that they ignore both philosophic study and scientific method; and that the neglect of fundamental education is their great mistake.

It is not strange that men of this description depreciate education, and underrate young men of culture. There is a higher rank of mercantile men who themselves have experienced the benefits of a high mental discipline, and who regard a good education as the prime qualification of an employé. Never has there been a time in which trained intelligence was more in demand in the affairs of business life than now. Mere "smart boys", without technical training, can not meet the re-

quirements of a "good situation." The young fellows who have taken a course in some respectable high school or academy, and those who have been to college, are at a premium in the *best market.* The lad of to-day who hopes without education to cope with rivals who have all that he possesses by nature and first-rate schooling beside, will probably meet with disappointment. A generation ago necessity compelled many a man of fine powers to forego the advantages of student life. But now that necessity does not exist. Indeed, the present necessity is culture. It stands to reason that faculties under discipline are of more service than faculties running wild. And we all know that knowledge is power. Then discipline and knowledge combined must be desirable. It would seem unnecessary to emphasize such an apparent truism, did not experience assure us that there is still much need of its enforcement upon the popular mind. The people do not yet too freely acknowledge the importance of education. They do not too keenly feel its importance. Many value the name of being educated rather than the thing education. Some regard education as some do religion, as a kind of garment to be ostentatiously worn, not as an instrument with which to do life's best daily work.

The disrepute into which graduates have sometimes fallen among practical men, may be partly accounted for, on grounds not favorable to the former. It must be confessed that going to school is not always getting an education. Nor is everything that passes under the name of education really that. Thousands have been spoiled in schools and colleges—spoiled for business and for everything else. This not because education is an evil, but because the particular institutions that spoil students are the worst of evils. But surely no sensible person will condemn a thing in itself because that thing has been counterfeited, especially if he remember that the best things are most frequently and most lamentably abused.

EDUCATIONAL INTELLIGENCE.

—— If any subscribers to the MONTHLY or NATIONAL TEACHER, who are also subscribers to the *National Normal*, will return the November number of the TEACHER, and inform the editor, they can have the amount of subscription paid on the *Normal* credited to them on their subscription to either the MONTHLY or TEACHER.

—— THE editor is again indebted to Prof. Venable, of Cincinnati, for the preparation of most of the articles in the editorial department proper; to Prof. Cook, of the Columbus High School, for several brief editorials and the items of intelligence relating to other states and countries; and to Rev. Dr. Moore and Messrs. Venable, Cook, and Farr for notices of books. The illness from which the editor has been suffering for over ten weeks (Oct. 23), has passed an important crisis, with favorable indications, and it is hoped that he will be able to give more personal atten-

tion to the editing of the December number. He heartily thanks the friends who have so kindly rendered him needed assistance.

—— The State Normal School at Winona, Minnesota, opened August 20th, with 122 pupils in the normal department, and 174 in the model school. Drawing has been introduced under a special teacher from the Normal Art School at Boston.

—— The compulsory school law of New Hampshire, which went into operation in 1871, shows the following results: In 1871 the number of children between four and fourteen years of age who did not attend school, was 4,602; in 1872 the number was 3,680; and in 1873 it was 2,593. These figures seem to indicate results satisfactory in a high degree.

—— At the last meeting of the State Teachers' Association of New Jersey, a resolution was passed, by a considerable majority, favoring the repeal of the law prohibiting corporal punishment. Many expressed themselves against corporal punishment, but felt that their usefulness was much impaired in certain localities by the fact that it was forbidden by law. They desired the same inscription on their banner as they have in Chicago: "Corporal Punishment permitted, but not inflicted."

—— Mrs. John Ogden has accepted a very tempting invitation to take charge of a Kindergarten in Chicago, and consequently has abandoned her enterprise in this city at the beginning of her second year. Her first year's work was very satisfactory to her patrons, and gave promise that Columbus would have the honor of sustaining the best Kindergarten in the West, but Chicago gave too loud a call. We heartily commend Mrs. Ogden to the good people of that city.

—— Mr. C. S. Smart, superintendent of the public schools of Circleville, O., is elected State Commissioner of Common Schools of Ohio, and will enter on his duties in January next. Mr. Smart is a graduate of Ohio University, Athens. He formerly had charge of the schools of Jackson C. H., but for several years past has had the supervision of the Circleville schools, where he has done an excellent work. Mr. Smart will succeed one of the ablest and most efficient state superintendents in the country, and we hope that he may attain a like success in this important office.

Massachusetts.—The new Smith College for women at Northampton will be opened for the reception of students in September, 1875. The requirements for admission will be the same as for the average college. —— The faculty of Harvard have determined to stop hazing, and they have asked and should receive the coöperation of parents and patrons. They will at once expel any that may engage in it.—— That the good salaries paid in Boston are a strong inducement to teachers is proved by

the fact that for the two or three vacancies recently existing in the Latin School there were more than 150 applicants representing some of the best elements in the profession.——Amherst College, at its recent examination of applicants, conditioned 86 out of 117; of these 47 were in mathematics, and 17 in spelling. But a few years ago and hardly a college ever "conditioned" except upon Greek and Latin. We are glad to note progress in the right direction.——Worcester has two truant officers, who not only look after truants, but other non-attendants, who should be present under existing laws. The results are favorable, and the Superintendent reports that attendance has improved in a marked degree. ——The State Teachers' Association will meet at Worcester during Christmas week.——The Anderson School of Natural History, held during the summer vacation for the benefit of teachers, was full, having 46 in attendance—20 ladies, 26 gentlemen. Sixteen States were represented. The advantages and conveniences were much greater than the previous year. The influence of this school will soon make itself felt over our whole country.——The new Normal School at Worcester was dedicated on the 11th of September. It is the fifth one of the kind in the State.

NEW YORK.—We learn that a movement has been made, aided by men in high positions, to induce the Board of Education in New York City to exclude all branches from the public schools except those belonging strictly to an elementary education, and to confine the study of language to the English. Mayor Havermeyer says:

"The fact is, our public school system is a farce and a humbug. The boys learn just enough to spoil them from being good workmen. They all want to be clerks or fancy book-keepers, or something of which we have a surplus in the population. Instead of learning a good trade, they learn to appear the gentlemen; and they are no good to themselves or anybody else. That is the result of our public school system, and I am against all such nonsense. I made all my sons useful members of society by putting them to work in my factory like other men. I do not care what misfortune may befall them, they can always earn an honest living."

The *wise* Mayor is endeavoring to saddle upon the public schools the neglect of parents in not placing their boys, after they have obtained their education, where they can properly apply it in accordance with their fitness. If he thinks his boys are better manufacturers because they are ignorant or very limited in their education, he is lamentably ignorant of the relations existing between education and our industries. It is too little and not too much education that leads men to despise work. One educated and skilled artisan is worth more to a community than a half dozen ignorant workmen. The Mayor's doctrine smacks loudly of aristocracy, and is not in harmony with the true spirit of liberty and progress. We rejoice that the spirit of our age demands even a broader education and deeper culture than we now enjoy.

PENNSYLVANIA.—Below we give selections from a letter in regard to the Philadelphia schools.

The buildings are creditable, and have their names distinctly placed in the front walls; and while many are deficient in the much needed

playground, we find others with clean paved yards, ornamented here and there with beds of flowers and shrubs—the compensation for this outlay we see at once in the refined manners of the pupils at their out-of-door exercises.

The schoolrooms are well furnished with the exception of blackboards, and conveniences for teachers are ample as regards dictionaries, desks, and dressing-rooms. No distracting linen shades flap in and out of the windows; in their place are convenient blinds. The movable partitions between rooms are desirable for concert and opening exercises, but prevent concentration of thought during lesson hours, since every recitation can be overheard. This plan of uniting the school for morning exercises has one advantage—it obviates the confusion of sounds heard when a dozen different classes are singing as many different hymns, which to outside people must seem a mere medley. It is customary for the principal of each grade to dismiss the classes of assistants, and as the children march in perfect time with the music, the effect is very pretty.

In the grammar department a room very nicely furnished is set apart for the "directors", who meet once or twice a month to settle questions of discipline, etc. Should corporal punishment be thought necessary, the teacher sends a note by the pupil to his parents requesting them to inflict the same, refusing to again receive him until he shall bring a certificate of chastisement. This is truly a novel mode of procedure, but one that might do away with many unpleasant scenes and injudicious methods of punishment in the schoolroom.

The one session system on stormy days still continues, although opposed by many—one o'clock being the hour for dismissal.

In the primary schools the pupils of many classes recite in concert, considering which we are greatly surprised at the proficiency made in elocution by the girls of the high school. Miss Patridge, who has charge of their training, works very hard with her classes, and nowhere have we heard clearer enunciation at "commencements" than from her graduates.

A music teacher is provided for each section, besides a general superintendent of music. There are twenty-nine sections. Twenty of these teachers are ladies—nine are men. The special music teacher meets all the classes of a grade together once a week, and teaches songs and the "practical" music, while the "mechanical" part falls to the lot of the regular teacher. He may drill the children on definitions, and have them learn the words of songs designated by the superintendent. *Here is an opportunity to show taste and individuality!* Imagine the effect of a song unwillingly taught!

Rewards are faithfully bestowed. "Distinguished" and "Meritorious" cards are issued weekly for good lessons and deportment. The course of study requires the same work from all, yet there is a difference of method in the various sections; but when we recollect the fact, that, of the twenty-nine, one section may include eight different buildings, a lack of uniformity does not appear strange. Some of the sectional boards are anxious for improvement, being composed of very enterprising men.

A few favor western methods, and have introduced some features of the object system.

The only mixed schools for white children are in distant neighborhoods, in small buildings generally, and for young pupils. Separation of the sexes is the rule. Without arguing the point, we think it needs boys and girls to make a school complete.

A visit to the Girls' High School well repays. The lady teachers (ten) are courteous and accommodating, while Mr. George Fetter is as genial a principal as we ever met. On the walls of his really elegant office are drawings executed by the girls, which, if we did not know were the work of pupils, would be regarded as coming from the hands of teachers, if not *masters*. In regard to physical training, they here make up for what they do not acquire in the lower grades. They are required to dress suitably, a good example being set by their teacher, Miss Patridge, of whom we have already made mention. The school numbers nearly six hundred pupils, consequently all the grammar classes prepared for advancement can not be admitted; only those with the highest standing are selected. Two classes a year are graduated from the high school, and twice a year also classes are advanced in the primary and secondary grades.

At the Reynolds' Grammar School the girls not only edit, but set the type for their little paper, *The Student's Record*. Some members of their board contribute to its columns, and also assist in making it a success financially.

From limited observation, we should say that the course of study in the primary schools does not come up to the requirements of the board, as laid down in their report, yet the teachers are favorable to new methods, and are pleased to receive visitors. "ITINERANT."

OHIO.—The Ohio Agricultural and Mechanical College opened its second year on Thursday, Sept. 17. Between sixty and seventy students are in attendance. An instructor in Drawing, Engraving, Painting, etc., has been added to the faculty. The Chemical, Physical, and Zoölogical laboratories are in working condition, and the institution is enjoying excellent prospects for work during the present year. Along with well equipped deparments of Ancient and Modern Languages this institution offers peculiar advantages for the study of Natural Science.

COLUMBUS.—The number of pupils entering the high school at the opening of the term was 271, an increase over last year of about 80. Two additional teachers have been appointed. A purely English course of study has been adopted in addition to the former Latin-English and German-English courses. Drawing is taught by W. S. Goodnough, late teacher of drawing in the normal school of Salem, Mass.; and music by Col. J. A. Scarritt. These gentlemen superintend the instruction in these branches in all the city schools.

SALEM.—The report of Supt. Henkle, for the year ending June, 1874, is a model for brevity. It is *multum in parvo*. The regularity of attendance is shown to have been much better than that of the preceding year. Honors are conferred upon pupils for attendance. "No absence gives

the first honor; one-half day's absence the second honor; and one day's absence the third honor." The number of cases of corporal punishment was 79. This speaks well for the discipline of the schools. The number of special promotions (97) shows that Supt. Henkle, by his system of examinations during the year, discovers the bright pupils, and at once places them in their proper grades. Much valuable knowledge might be obtained by a careful study of the management of the Salem schools.

UNIVERSITY OF CINCINNATI.—The University of Cincinnati entered upon its first regular session on the first day of October, 1874, in temporary quarters in the Third Intermediate School Building on Franklin street. The following professors have been elected by the board of directors, and have begun their duties: H. T. Eddy, C.E., Ph.D., in the chair of Mathematics and Astronomy; F. W. Clark, B.S., Physics and Chemistry; F. D. Allen, A.M., Ph.D., Ancient Languages and Philology. M. Quetin has been engaged as instructor in French, and Herr Van Kossum as teacher of German. The School of Design, a branch of the University established in 1868, in the Cincinnati College Building on Walnut street, is in a most flourishing condition. It has two departments, one of drawing and design, directed by Mr. T. S. Noble, and the department of wood carving, superintended by Mr. Ben Pitman. The new Observatory on Mount Lookout is also in charge of the University Board; and is now ready for use.

CINCINNATI.—A strong but unsuccessful effort was made last month in Cincinnati to change the hour of closing the Intermediate Schools, from four o'clock P.M. to two. The movement received the sympathy of many parents.——Some important changes have been made in the course of study for the high schools of Cincinnati, to adapt it to the prospective requirements of the new university. The remodeled course comprises three divisions termed classical, technological, and general. It is the opinion of some who have looked into the matter, that the changes made in the curriculum rather tend to diminish than to increase the aggregate labor of both teachers and pupils. It is to be hoped that the standard for graduation will not be lowered.——The Friends of Inquiry had a lively discussion, continued through two of their recent meetings, on the subject of the division of the public school fund for the benefit of denominations. The Catholics were out in force, and are said to have conducted their part of the discussion with much ability.——The Society of Natural History has enjoyed a year of unusual activity and healthy growth. The collections in the museum in college building are becoming numerous and varied, so that larger rooms are already required for their accommodation. The articles displayed by the Society at the late Exposition attracted much intelligent attention.

INDIANA.—The State Teachers' Association will be held in Indianapolis beginning December 29th.——The State Board of Education asks—"Do you take or read educational works or periodicals? If so, name them." Truly an important question.——Prof. James M. Smart, for several years past, the efficient superintendent of the public schools of

Fort Wayne, Ind., has been elected State Superintendent of Public Instruction. Alexander C. Hopkins has been appointed to the same office by the Governor to fill the unexpired term of his father deceased.—— Prof. J. B. Roberts, of Illinois, has accepted the principalship of the Indianapolis High School, and Mrs. N. A. Stone, formerly of Akron, O., has accepted the lady principalship, at a salary of $1,500. Ohio has lost and Indiana has gained a teacher who has few equals.

ILLINOIS.—R. L. Cowan, lately of Evansville, Ind., has been elected Supt. of the Mt. Carmel Schools.——There were 160 teachers present at the Vanderburgh County Normal Institute conducted by County Supt. R. P. Hooker. He stated that he hoped to be able to report an average term of eight months even in the county schools for the next year. We are informed that he is laboring hard to create a professional spirit among his teachers.

CHICAGO.—We have before us that part of Supt. Pickard's report referring to the result of the new methods of discipline, or rather the abolishing of an old method. For two years the teachers of Chicago have been working with the motto before them—"Corporal punishment permitted, but not inflicted." The results of the first year are well known, and those of the second have been looked for with great interest both by the friends and foes of the movement—by the friends with a heartfelt prayer for results indicating success, and by its foes with hopes of failure. The report says:

"*Order* is as good as ever before.

"*Obedience* has been prompt and cheerful.

"*Willful Disobedience* and *Malicious Conduct* have been less frequent than in any previous year.

"*Suspensions for Misconduct*, which the advocates of corporal punishment so much dread, have diminshed under the trial.

"In the matter of Suspensions for Misconduct witness figures taken from our books, based on daily attendance:

For the year 1865–66 one to 20,000 pupils.
For the year 1866–67 one to 12,000 pupils.
For the year 1867–68 one to 10,000 pupils.
For the year 1868–69 one to 12,000 pupils.
For the year 1869–70 one to 10,000 pupils.
For the year 1870–71 one to 14,000 pupils.
For the year 1871–72 one to 22,000 pupils.
For the year 1872–73 (the first year of our experiment) one to 9,000 pupils.
For the year 1873–74 one to 24,200 pupils.

"Since the difficulties attending a radical change in school discipline have been overcome, there has been steady advance, and the last term of the year under review shows special suspensions to have been in the ratio of one to each 52,000 pupils in daily attendance.

"The change in the relative proportion of bad cases appear in a favorable light from the following comparison with the past year. The cases are classified under four heads:

"No. 1 embraces all cases that are the result of continued thoughtlessness, without willful intent.

"No. 2 embraces all cases of persistent and willful disobedience.

"No. 3 embraces all cases of damage to property, violent or obscene conduct, such as in more advanced stages would subject older offenders to criminal prosecution before the courts.

"No. 4 embraces all cases of second or third suspension, when the first suspension failed to result in improvement of the offender.

"The per cent of each is given that a fair comparison may be made.

	No. 1.	No. 2.	No. 3.	No. 4.
1872–3	8½ per cent.	52½ per cent.	34½ per cent.	4½ per cent.
1873–4	36 " "	33½ " "	27½ " "	3 " "

"As our suspensions are temporary and do not work entire removal from school, the evil resulting from suspension is not so great as might be feared. On the contrary, it is found that the large majority of those once suspended do not reach the same point of discipline the second time, but they generally are improved by the punishment.

"The marked success thus far achieved is entirely due to the united and earnest effort of a body of teachers who have no personal ends to serve, but whose sole aim is the highest good of the schools entrusted to their care."

The superintendent says that the discipline is much easier than formerly, and that in his daily visits he has rarely found the teachers engaged in the work of discipline. He says: "While corporal punishment was in use, the cases in which I found teachers attending to discipline were as three to one compared with the same class of cases during the past two years." From the above fact he is led to believe that it requires less time of the teacher to attend to the discipline than under the old method.

In speaking of suspension which is used as a last resort, he says: "Nine schools, enrolling more than 6,500 pupils, have had no case of suspension during the year; six schools, enrolling nearly 4,500 pupils, have had but one case each."

The above facts deserve, and we are confident will receive, the most careful consideration from teachers over the entire country. If a great city like Chicago, with a school enrollment of nearly fifty thousand pupils, can manage her schools with such results, surely those of us working in smaller cities and towns should not be behind in this great and reformatory change in school discipline. We believe that the Chicago teachers are doing better and more intelligent work than ever before as a result of the past two years' experiment.

KANSAS.—A correspondent writes: "This country has been very much affected this year by the failure of crops, in consequence of drouth, chinch bug, and grasshoppers, and the people are somewhat depressed in spirits, as well as shortened in finances; but I think the last interest to suffer will be the educational. This country is worth too much to be abandoned; the people have faith in its future, and the better class will remain."

ALABAMA.—We are glad to learn that in this State the contracts made with teachers the present year have been promptly fulfilled; this we understand is owing to the fact that the public funds are retained and expended in the counties where collected. For several years past the funds have been either squandered or misapplied, and much dissatisfaction and loss have resulted. In the poorer districts the schools are maintained only for a very short time, and are of a very inferior quality.

Even the best schools offer but little inducement to professional teachers. We trust the day is not far distant when the public schools shall be placed upon a better footing in this State.

GREAT BRITAIN.—A College of Medicine for Women, which has been advocated for some time, was opened in London on the 12th of October. A very eminent corps of Professors has been appointed for the work.—— We learn that there is a movement on foot among the students of St. Andrews to elect Mr. Darwin as Rector in the place of Lord Neaves, who retires in November. At the last election Prof. Huxley was defeated by three votes. Many of the students desire a scientific man for the position.

—— THE *London Saturday Review* contains an article upon the subject of Compulsory Education. It takes up the consideration of "two very serious objections to compulsory school attendance—the objections that children are contributing either to their own support or that of their parents, or that they are doing work at home which must otherwise go undone. The first of these objections is often urged in the interest of employers, but in a matter of this kind the employer has, properly speaking, no right to be heard. There is no doubt that the community benefits in the long run by the extension of education among the working classes, and this ultimate gain ought not to be sacrificed to make manufacturers richer. Indeed the objection is a short-sighted one, even as regards the class on behalf of which it is alleged. The ablest employers are agreed that one of the most serious industrial disadvantages against which England has to contend is the want of technical information in workmen. Their labor is worth less than it otherwise would be worth because it is unintelligent. Now technical information must, as a rule, rest upon a basis of elementary instruction. Here and there a workman may be found who has educated himself from the beginning, but ordinarily it is the best-taught boy that makes the best-taught man. Where reading, writing, and arithmetic have not been thoroughly learnt at school, the application of them will not be thoroughly learnt when school is over. But where the interest of the parent or of the child himself can be pleaded in favor of sending him to work early, the question is not so quickly disposed of. There are cases in which a widow or a bedridden father depends, in part at least, for support upon the labor of very young children. There are other cases in which the wages of each child form an appreciable, though it may be only a small, part of the total income of the family, and if any one of these children is kept at school instead of at work, the fund out of which he has to be fed and clothed will be proportionately lessened. There are other cases again in which the mother is, in whole or in part, the bread-winner of the family; and while she is at work the babies must be looked after, and the natural person to look after them is one of the elder childen. It is sometimes said that to compel children to be sent to school under these circumstances, is to legislate in complete disregard alike of the wants and of the wishes of the poor; that it is better for a child to be doing his duty by contributing to the support of his parents than to be con-

sulting his own eventual advantage; and that as regards the child himself, it is of more moment that he should have enough food than that he should have enough schooling. In respect of every child who is kept at school when he might have been at work, there is a money loss to the persons who would have appropriated his wages. So far as this loss falls upon persons who can bear it without inconvenience, no harm comes of it; but in many instances the subtraction even of two or three shillings from the weekly income must mean either that the sustenance of the family or of some members of it is brought nearer the level below which life can not be maintained, or, if that level has already been approached as nearly as possible, that the family must fall back upon the parish. The father is pauperized on the plea of improving the condition of the children.

"The answer to this reasoning is necessarily of a cumulative kind. In the first place, there is an extraordinary amount of evidence to show that the universal diffusion of elementary education is a benefit both to the community and to the classes specially affected by it. Probably no one would deny that, if by a miracle the standard of education in England could suddenly become what it is in Prussia, or Switzerland, or even Scotland, it would be a very great improvement on the present state of things. In the second place, this improvement is desired, not perhaps by the individual parent, who feels the convenience of having his child's earnings in addition to his own, but by the class to which these individual parents belong. The working classes generally are quite aware how much their advancement depends upon education; and since for the most part nothing can be done in this way for themselves, they are the more anxions that something should be done for their children. There is good ground to suspect that some, at all events, of the objections professedly prompted by feeling for the parents are really prompted by the feeling which leads employers to prefer cheap labor to dear. This fact suggests a third consideration which goes to lessen the weight of the argument against enforced attendance at school. In proportion as compulsion becomes universal the hardship inflicted by it in particular cases becomes less. If all the boys in a parish are employed in scaring birds when they ought to be at school, and one or two of them are taken out of the fields and set to learn their letters, the work will continue to be done by the remainder, and, so far as money is concerned, the parents of the boys who are taken away will be losers. But supposing all the boys in the parish were treated in the same manner, the farmer would have to employ older hands for the same purpose. The labor of children is an addition to the income of the parents only so far as it does not bring them into competition with their parents. There are few industries in which grown men could not do the work which is now done by children, and when compulsion becomes the rule, instead of as now the exception, a great many parents will find that the income of the family has not grown less, though it is gained by a smaller number of workers."

THE GIRLS IN THE UNIVERSITY OF LONDON.—At the adjudication of prizes at University College, London, the first prize in jurisprudence was awarded to a young lady who two years ago, at the same college, achieved a like success in political economy. The second place in the same class was attained by another lady. Still another obtained honors in political economy; and prizes were gained by three, and certificates by several, in the fine art classes. That women should prove themselves equal to men in drawing and painting is, perhaps, less remarkable than their success in sterner studies; but it is noteworthy in these days when fresh consideration is being given to the question of female education. The experiment of mixed classes has as yet been only very partially tried at University College, and its extension through the whole of the art schools would involve none of the peculiar difficulties that have been incident to the attempt to teach medicine to ladies in Edinburg. The Senate of the University of London is soon to consider the recent vote of convocation in favor of admitting women on the same conditions as men, to its degree examinations. If a woman, competing at college with men, can take prizes in political economy and jurisprudence, it is hard that she should not be allowed the chance of obtaining a degree in arts or laws.—*London Athenæum.*

SWITZERLAND.—We learn from a correspondent in one of our exchanges that though education is in an highly advanced state in Switzerland, yet at the annual congress of teachers, recently held at St. Imier, many of the same questions which puzzle us in regard to normal instruction, rights of parents, how to secure regular attendance, etc., were up for discussion. It may encourage some of us who are struggling with these very difficulties to know that even in the home land of Pestalozzi they are not yet satisfactorily settled.——From *Nature* we learn that at the recent meeting of the Swiss Society of Public Usefulness, which met at Fribourg, two subjects engaged its attention, viz: Public Instruction and Industry. It was discussed whether the professional teaching now given in the Confederacy should be changed; and whether in the secondary schools for boys, a larger share of scientific education ought not to be given, combined with practical exemplification, manual labor, and experience in industrial chemistry; whether in the secondary and superior schools for girls, sufficient attention is paid to the class of studies which will be of service in careers now open to women; and if their education is directed toward facilitating their entering into new occupations, whether it would not be advisable to introduce into these schools for girls commercial education, and the study of drawing, and designing as applied to manufactures?

——AUSTRIA has 59 well-equipped normal schools, taught by 531 teachers, and attended by 3,500 pupils; Prussia has 62 normal schools, with 3,614 pupils; Saxony has 18 normal schools; Belgium, 30; Wurtemberg, 10; and Bavaria, 10. They evidently do not believe in Europe that teaching "comes by nature."—*Exchange.*

BOOK NOTICES.

OUTLINES OF THE WORLD'S HISTORY: Ancient, Mediæval, and Modern. With Special Relation to the History of Civilization and the Progress of Mankind. By WILLIAM SWINTON. New York and Chicago: Ivison, Blakeman, Taylor & Co.

This little volume is a manual of 498 pages, designed by its author "for use in the higher classes in public schools and in high schools, academies, seminaries, etc." It is, as its title claims, an outline, necessarily brief, yet comprehending the salient points of the location, the origin, the progress, and the decline of the nations and empires which have passed away; with a brief glance at mediæval history; a view of the transition to modern history; and a resumé of the great events of the sixteenth, seventeenth, eighteenth, and nineteenth centuries. All that can reasonably be expected from such a work, condensing the annals of forty centuries of history, is, that it shall touch upon the most salient features, and give hints at least of the causes which have tended to the growth or decay of morals, of civilization, and of power. Omissions of course there must be, and it would be easy to find fault. The work in the main, however, is well done. Its chief divisions are, as ordinarily accepted, three. Under the first (the Ancient) is placed a brief account of Egypt; Assyria and Babylon; the Hebrews; Phœnician; Hindoos and Persians. A fuller account follows of Greece, in three periods; and of Rome under the Kings, the Republic, and the Empire, closing with the 5th Century A.D., embracing 211 pages. The second division (Mediæval History) includes the centuries from the 6th to the 16th, briefly handled in 76 pages. The third division (Modern History), beginning with the 16th Century, and closing with the crowning of the Emperor William, of Germany. The arrangement is clear. Each chapter is followed by a synopsis for review, with a chronological summary. Maps, everywhere and in profusion, with illustrations of buildings, works of art, etc., furnish the needed aid to the reader or learner. The press work is well done.

In the hands of a competent and enthusiastic teacher, this manual will be found of high value, as furnishing the thread on which the pearls of history may be strung. As a compend, for the use of the intelligent reader, who wishes to refresh his knowledge of the main facts of the world's history, or to extend a limited acquaintance with the past, it will be found useful. In the hands of the mere monitor, exacting of the luckless pupil memoriter recitations of names and dates and facts, it can but add another to the groans of the sufferers whose cry already rises to heaven, "Of the making of many books there is no end; and much study is a weariness of the flesh."

It is significant of the awakening feeling that the history of man should be placed at least on a footing in our schools with the history of matter, and that we should add to our knowledge of the earth we tread, a knowledge of the intelligent being who treads it, that there lie upon our table, in addition to the work noticed above, Gilman's Fist Steps in General History and Bayard Taylor's History of the Germanic Race. These works may be noticed in your next number. W. E. M.

RECORD OF MR. ALCOTT'S SCHOOL, Exemplifying the Principles and Methods of Moral Culture. By E. P. PEABODY. Third Edition, Revised. Boston: Roberts Brothers, 1874.

The name of A. Bronson Alcott, familiar in New England, and not unfamiliar in the West, is associated in many minds with a transcendental philosophy not regarded by practical men as of much value in building up American institutions. It is even the fashion with certain critics to ridicule Mr. Alcott, and to denominate him a visionary sentimentalist. But this man is by no means to be disposed of with a few contemptuous words. In point of wisdom he stands not far below Emerson. Like Emerson he is a Platonist, and believes in the applicability of Platonic philosophy to modern life. His method as a moral teacher is Socratic; the material of his instruction is derived from the best meditative writings of early and later times.

The book before us is a new edition of the original work first published forty years ago. Few educational books survive so long, and yet retain so much that is vital and suggestive. Much in these pages, that now seems commonplace, was novel forty years ago. Alcott's school was ahead of its times. It had faults; but its merits were many and great. It brought forth good fruits. "I believe", says the editor of the *Record*, "his school was a marked benefit to every child with whom he came into communication; for he was a greater influence, immeasurably, than his specific method." The results of his moral influence, as well as the character of his moral ideas, are manifest in the writings of his distinguished daughter, Miss Louise Alcott, whose "Little Women" and "Little Men" are just such as the "Temple School" would be likely to develop.

The "Record of a School" is pleasantly written, and gives a clear and often very minute account of just what Mr. Alcott actually did to educate the moral and spiritual faculties of his pupils, and just what difficulties he encountered. The children's part in the daily routine of the school is recorded with fidelity. The children were allowed to be children and to act as such. The memoranda of their questions and answers when in conversation with their teacher, are extremely interesting.

The book contains many aphorisms of value to teachers everywhere. Upon the whole it is well worth possessing. W. H. V.

KRUSI'S GRADED SYSTEM OF DRAWING. Part III; Perspective Series (Grammar School), 4 Books and Manual. By HERMAN KRUSI, Instructor in the Philosophy of Education in the Normal and Training School, Oswego, N. Y., and formerly teacher of Drawing in the Colonial Training School, London. New York: D. Appleton & Co. Geo. H. Twiss, Columbus, Ohio, Agent.

The Synthetic and Analytic Series have both been noticed in our columns. This series fully meets the promise in Parts I and II, with which we were favorably impressed. The publishers have certainly done their work well. The paper is excellent and the engraving soft, and a beautiful imitation of pencil work.

The Manual is a neatly bound book of sixty-five pages, and gives full and minute instruction to the teacher for developing the laws of per-

spective by the use of blocks, and their application in drawing the objects given in the drawing books. It is not a mere manual of dictation exercises, but a simple plan of teaching by the inductive methods of the Pestalozzian School with which Prof. Krüsi is familiar, and in which he received his early training. The great idea of this school—that children should study nature before books, and that their education should be based on actual experience—is admirably wrought out and adhered to in this system. The author aims to secure mental development and, at the same time, give the pupil the power of illustration—a new language—useful in every department of industry, science and art. He aptly says, "The endeavor to reach nature through historic forms of art to set up an artificial instead of a natural standard of art; to begin the study of leaves and flowers by a form called conventional leaf or flower, but which must be labeled to be known is the part of a system rapidly becoming obsolete. It cramps invention, sets limits to progress, and takes from drawing its chief worth as an *educational* influence." In the general awakening of interest in this subject, teachers should be careful not to be led astray by the attractive features of advanced art, and by that which is only within the range of mature and disciplined minds, but seek that for children which is within their conception. With our limited knowledge of the subject, and looking from the standpoint of the teacher, rather than from that of the artisan or artist, this system seems to us to present features of an educational value not so apparent in any other that we have examined. In this judgment we are guided by educational principles of universal application. We commend the system to the attention of teachers.

INTRODUCTION TO ALGEBRA. By EDWARD OLNEY, Professor of Mathematics, Michigan University. New York: Sheldon & Co.

Those teaching algebra to beginners, will find many useful hints in this little book. We call attention to a few points. In the explanation of the use and meaning of exponents, the pupil is warned from the first that an exponent need not denote a power; that negative and fractional exponents are to be interpreted in quite a different way, as the pupil will afterward see. The reason for the sign of a product is explained with unusual clearness. The use of the parenthesis is not explained until the pupil is familiar with the fundamental processes. The theorems most used in factoring are arrived at by easy inductions, the pupil discovering for himself that the sum of the same odd powers of two quantities is divisible by the sum of the quantities; that the sum of the same even powers is *not* divisible by the same, etc., the formal demonstration being reserved for a more advanced stage of progress.

The pupil is led to like to solve problems by means of equations. He is clearly shown that though all the examples at first solved through the equation might just as well have been "done in his head", he must not disdain the equation; it will soon be a wonderful instrument in his hands. The treatment of ratio and proportion is out of the usual line, concise and rigorous, comprising all the propositions usually taught. The book includes the treatment of radicals of the second and third degree, and pure and affected quadratics.

It is not a *complete* book, but emphatically a book for beginners. Should the book never find its way to the hands of pupils at all, we think it well worth the publishing for the aid that it will give to teachers. A. G. F.

A Complete Algebra. New York and Chicago: Ivison, Blakeman, Taylor & Co.

This book, written by Prof. Ficklin, of Missouri University, is to constitute one of "Robinson's Shorter Course" in mathematics. The introduction of carefully prepared synopses for frequent review is an excellent feature, but aside from this we see nothing to make the work superior to half a dozen other algebras that might be named and which are already in general use. A geometry and other books of the series are soon to appear. A. G. F.

Harkness' New Latin Grammar. New York: D. Appleton & Co. Geo. H. Twiss, Agent, Columbus, Ohio.

It is with pleasure and much satisfaction that we have examined the new features of the first and second parts of this grammar. All has been added that the most exacting could desire in an elementary work; and yet it has not been changed so much but that it has a familiar appearance to its old friends. In reading over its pages we find much that has been re-written with a view to incorporate the latest information that can be regarded as reliable upon the subjects treated. We are sure its old friends will be glad to welcome it, and we predict that it will make many new ones. E. H. C.

NEW BOOKS RECEIVED.

History of Germany. From the Earliest Period to the Establishment of the German Empire in 1871. By Bayard Taylor. New York: D. Appleton & Co.

Shaw's New History of English and American Literature. Prepared on the Basis of "Shaw's Manual." By Truman J. Backus, A.M. New York: Sheldon & Co. Price, $1.50.

Elementary Lessons in Historical English Grammar. By Rev. Richard Morris, LL.D. London: MacMillan & Co. Cincinnati: Robert Clarke & Co. Price, $1.25.

Science Primers. No. VI.—Physiology. By M. Foster, M.A., M.D., F.R.S. New York: D. Appleton & Co.

American School Music Reader. Nos. 1, II, III. By L. O. Emerson and W. S. Tilden. Boston: Oliver Ditson & Co. New York: C. H. Ditson & Co. Chicago: Lyon & Healy. Prices, 35c., 50c., 50c.

Krusi's Drawing. Perspective Series. Four Numbers. By Hermann Krüsi, A.M. New York: D. Appleton & Co.

Hand-Book of Perspective Drawing. Krusi's Drawing Series: Part III. By Herman Krüsi, A.M. New York: D. Appleton & Co.

Independent Elementary Geography. By James Monteith. New York and Chicago: A. S. Barnes & Co. Price, 80 cts.

The Song Fountain: A Vocal Music Book for School and Family Use. By Wm. Tillinghast and D. P. Horton. New York: J. W. Schermerhorn & Co.

THE COMBINATION SPELLER. By James W. Shearer. New York and Chicago: Ivison, Blakeman, Taylor & Co.

HALF-HOUR RECREATIONS IN POPULAR SCIENCE. Dana Estes, Editor. No. II and No. XII. Price, 25 c. Boston: Estes & Lauriat.

HALF-HOURS WITH INSECTS. A. S. Packard, Jr., Editor. Part 3 and Part 4. Price, 25 c. Boston: Estes & Lauriat.

CHAFFEE'S WRITING SPELLER, Syracuse, N. Y.: August Kœhler.

THE BUILDING OF A BRAIN. By Edward H. Clarke, M.D. Boston: James R. Osgood & Co.

AMERICAN EDUCATIONAL ANNUAL. New York: J. W. Schermerhorn & Co.

REPORT OF THE SCHOOL COMMITTEE OF BOSTON. Boston; Rockwell & Churchill.

SCHOOL REPORTS.

Report of the Commissioner of Education. 1873. Gen'l John Eaton, Commissioner.
Twentieth Annual Report of the City of Chicago, Ill. 1874. J. L. Pickard, Supt.
Thirty-Seventh Annual Report of the City of Cleveland, O. 1873. A. J. Rickoff, Supt.
Twenty-Eighth Semi-Annual Report of the City of Boston, Mass. 1874. John D. Philbrick, Supt.
Fifth Annual Report of Richmond, Va. 1872-3. J. H. Binford, Supt.
Seventh Annual Report of Shelbyville, Ind. 1873-4. W. A. Boles, Supt.
Ninth Annual Report of Decatur, Ill. 1874. E. A. Gastman, Supt.
Ninth Annual Report of the City of Savannah and County of Chatham, Ga. 1873-4. W. H. Baker, Supt.
Second Annual Report of Bibb County, Ga. 1874. B. M. Zettler, Supt.
Annual Report of Kalamazoo, Mich. 1873-4. Austin George, Supt.
Annual Report of Nashville, Tenn. 1873-4. S. Y. Caldwell, Supt.
Annual Report of York, Pa. 1874. W. H. Shelley, Supt.
Annual Report of New Bedford, Mass. 1873. H. F. Harrington, Supt.
Annual Report of Minneapolis, Minn. 1874. O. V. Tousley, Supt.
Annual Report of Chillicothe, O. 1874. J. H. Brenneman, Pres. Board of Superintendence.
Annual Report of Steubenville, O. 1874. M. R. Andrews, Supt.
Quadrennial Report of Circleville, O. 1869-73. C. S. Smart, Supt.
Manual of the Hudson Union School. 1874-75. A. E. Gladding, Supt.
Annual Register Rensselaer Polytechnic Institute, Troy, N. Y. 1873-4.

CATALOGUES.

Michigan State Normal School, Ypsilanti, Mich. 1873-4. Rev. Jos. Estabrook, M.A., Principal.
Cumberland Valley State Normal School, Shippensburg, Pa. 1873-4. George P. Beard, Principal.
Indiana State Normal School, Terre Haute, Ind. 1873-4. Wm. A. Jones, President.
North Missouri State Normal School, Kirksville, Mo. 1874-5. J. Baldwin, President.
South Missouri State Normal School, Warrensburg, Mo. 1873-4. James Johonnot, Principal.
State Normal School, Providence, R. I. 1874. J. C. Greenough, A.B., Principal.
East Tennessee University and State Industrial College, Knoxville, Tenn. 1873-4. Rev. Thos. W. Hume, President.
University Grammar School, Providence, R. I. 1873-4. Merrick Lyon, Principal.

Bunker Hill Academy, Bunker Hill, Ill. 1873–4. Elliott Whipple, A.M., Principal.
Jamestown Union School and Collegiate Institute, Jamestown, N. Y. 1873–4. Samuel G. Love, Supt.
Curry Institute, Pittsburgh, Pa. 1873–4. G. T. McCord and S. A. Will, Principals.
Cook County Normal and Training School, Englewood, Ill. 1873–4. D. S. Wentworth, Principal.
University of Wooster, Wooster, O. 1873–4. Rev. A. E. Taylor, D.D., President.
Xenia College, Xenia, O. 1873–4. Wm. Smith, A.M., President.
Orwell Normal Institute, Orwell, O. 1874. H. U. Johnson, Principal.
Hopedale Normal School, Hopedale, O. 1873–4. W. Brinkerhoff, A.M., Principal.
Ohio Central Normal School, Worthington, O. 1874–5. M. H. Lewis and John Ogden, Principals.
Mt. Union College, Mt. Union, O. 1874–5. Rev. O. N. Hartshorn, LL.D., President.
Ohio Agricultural and Mechanical College, Columbus, Ohio. 1873–4. Edward Orton, A.M., President.
Central College Academy, Central College, O. 1874–5. Rev. F. A. Wilbur, Principal.
Hahnemann Medical College and Hospital, Chicago, Ill. 1874–5. A. E. Small, M.D., President.

PAMPHLETS.

Circular of Information of the National Bureau of Education. No. 2. John Eaton, Jr., Commissioner.
An Address before the Alumni Society of the University of Nashville, by William Shelton, D.D., Nashville, Tenn.
An Address before the Association of the Graduates of the United States Military Academy. By Prof. Charles Davies.
The Origin, Growth, and Tendencies of Education in the United States. By Orison Tomlinson.
The Scientific Value of the Yellow Stone Park. By T. B. Comstock, B.S.
What does the Bible represent in the American Common School? By Rev. A. D. Mayo.
L. Prang & Co.'s Illustrated Catalogue for Fall, 1874.
Eighth Annual Session of the Tennessee State Teachers' Association, Nashville, Tenn.
Requisites to a Reform of the Civil Service. By Dr. J. W. Hoyt.
A National University. By John W. Hoyt.
On A National University. A Paper read by Wm. T. Harris.
Report of the Committee on Education of the New York City Council of Political Reform upon Compulsory Education.
Proceedings of the Eighth Annual Meeting of the Georgia Teachers' Association, held in the City of Macon, April 28th, 1874.
Vick's Floral Guide. No. 4, 1874. James Vick, Rochester, N. Y.
What we owe to Louis Agassiz as a Teacher. An Address by George B. Emerson.
Our First Hundred Years: The Life of the Republic of the United States of America. Part I and Part II. By C. Edwards Lester. New York: United States Publishing Co.

HELPS TO HISTORY.—Twenty Games on History of United States sent by mail for 75 cts. Address: D. Eckley Hunter, Bloomington, Monroe County, Indiana. See advertisement in this number.

THE

NATIONAL TEACHER:

A MONTHLY EDUCATIONAL JOURNAL.

Vol. IV. DECEMBER, 1874. No. 12.

CLASS INTERVALS IN GRADED GRAMMAR SCHOOLS.

(*Concluded.*)

I have now a few words to say about *promotions* as they are affected by longer or shorter intervals between the classes. Both you and Mr. Harris lay great stress on the fact that a year's interval represses promotions; and you pronounce this a grievous wrong. I frankly confess that I do not understand you. I can readily divine the status of a school in which promotions make one of the customary instrumentalities of influence and progress. But do you have such schools in Columbus? and are any such to be found in St. Louis? Is not the "course of study" in each of those places so adjusted as to meet the intellectual demands of a scholar at every step of his progress, following him along until, 14 years of age, he has compassed a full schedule of elementary study? True, a well-constructed Manual of study presents only the minimum of requirement. But do we not expect that minimum to serve only as a skeleton, which the teacher is to clothe with flesh and blood, and round out into full proportions, so as to meet the expectations of the ambitious, satisfy the cravings of the intellectual, and occupy the time of the most proficient? Promotions a customary instrumentality! The school in which it is so must be addressing itself all the time to mediocrity alone, on a comparatively low level of purpose, without stimuli to create a healthful *esprit de corps*, and wanting in the characteris-

tics of vigorous intellectual life. If complaints should come to me from any parent that his child does not have enough, to do, is reaching beyond his classmates, and would better be promoted, I should look sharply after the teacher of that child, to find out what might be interfering to prevent the adequate performance of duty. I never have such complaints—never. Promotions are not provided for in our system—are not asked for—could have no legitimate place. The best scholars, all throughout our grades, find constant and delighted occupation.

But suppose we accord with Mr. Harris in his position, and accept his remedial system, what then? The superior scholars, as fast as they come to the front in any class, are promoted to the next higher; and thus when they reach the close of their career, may have gained from *one to two* years out of the allotted *five*. That is to say, if the "course of study" is arranged to occupy five years in time, so as to be completed by an average scholar at 14 years of age, these superior scholars will have finished it in from three to four years, being at the close from 12 to 13 years of age. And what is to be done with them afterward, if they desire a longer period of study? Will you put them into the high school? They are not fit for it. The high school wants *maturity* not *precocity*—for the capacities of the former are likely to be very diverse from those of the latter. The studies of a high school, if what they should be, ascend into the region of abstractions and pure thought, and are beyond the powers of the child of 12 or 13 years of age, no matter how gifted he may be. When the mastership of the Boston Girls' High School was offered to Dr. Elliott, two years ago, he consented to accept the position, provided a regulation should be adopted that no scholars should be admitted to the school under 15 years of age. He was in the right; and the School Committee adopted the regulation. A mature mind alone can fully and profitably grapple with the curriculum of the high school; and positive injury is done to a child and to society through him, when advantage is taken of what may be really only a certain vivacity of mental action coupled with a quick working, retentive memory, to crowd him forward at an early age into the high school.

Equally wrong is it thus to push gifted scholars unduly forward, if they are to go out into the world when their elementary course has been completed. The studies of the last two years in a grammar school are worth a hundred per cent more

to a scholar who is somewhat mature in age, than to one who is comparatively a child.

From another point of view, what sort of an education must scholars receive—in itself considered—who are thus jumped, by a succession of kangaroo leaps, from the bottom to the top—with gaps in the continuity of their learning at regular intervals all throughout? What sort of mental discipline will fall to their lot? And who need solid, uniform, protracted mental discipline more than the "superior" scholars whose infatuation it usually is to rely on their impulsive native power, without the harness of methodized endeavor!

"Degradations" are pernicious enough in their influence. But I honestly think "promotions" decidedly worse. Things must be in a bad way where they are a recognized and customary instrumentality.

At this point I take occasion to say that I do not believe that the causes of early withdrawals from school have much to do with the intervals between classes; or that a reconstruction of school systems whereby those intervals would be shortened, would diminish them to an appreciable extent. If a laggard can not be stimulated to exertion by the fear of being put down a whole year, I do not believe he can be coaxed into activity by having his fall shortened to a "quarter's" length. It will be found that the drones will still remain drones, and drop out as frequently as ever.

In fact the causes of withdrawals are to be found mainly, in an entirely different direction; and are to be removed, so far as they are susceptible of removal, by entirely other means. This is readily proved. Here in New Bedford there is a year's interval between our classes; and we have at least fifty per cent more scholars who remain connected with the grammar schools all throughout, than when our interval was only half a year, *but when the school work was conducted on very different principles and by very different methods than now.* In various cities and towns near us, large and small, reclassification takes place semi-annually; yet the chronic wail comes to our ears as loud as ever, over the multiplicity of early withdrawals, which number twofold those of our own. We may as well cease our attacks on class intervals, and level our artillery against the artificial and arbitrary methods of work and discipline, which disgust when they should delight; which prevent a feeling of attractive interest, a hearty *esprit de corps* and a forthputting ambition;—

level it, moreover, at a style of teaching which has no uplifting, enlarging, life-giving power.

I close with a brief description of the system according to which our New Bedford schools are working—a system which we have settled down upon in great confidence, after many well-tried experiments and contrasted experiences.

We have a year's interval between our grades. But the interval, in reference to the points now under consideration, is scarcely more than nominal. For we have no appointed system of degradations and promotions; no reconstruction of classes. But the classes are advanced *in mass*, preserving their identity as they progress upward along the grades. Of course individual instances occur, from time to time, as to which it will appear to be for the benefit of the scholars concerned that they should be *put down;* that is, should go over a year's work a second time. But these are truly exceptional cases—as likely to present themselves at one season of the year as another. They amount to a very small per cent of each grade; not enough ordinarily to create a disturbing ripple on the surface of our school affairs.

You and Mr. Harris pronounce this progression of classes in mass to be a system loaded down with difficulties at the start, and not to be thought of. Where do you get your data for this *ex cathedra* decision? *Try the system*, I say; TRY IT—fairly and fully, just as we are trying it, finding occasion to exult in it and confide in it more and more, every day, so that nothing could persuade us to change it for another. Do you say that it "chains the brightest to the dullest throughout the course—an efficient process for reducing pupils to the level of mediocrity"? You make me smile by such language, as I think of the work and condition of our grammar classes; think of the abounding life, the ardent interest, the mental curiosity eagerly astir, engaging the full activities of the most gifted, in genial and happy endeavor!

Do you say that by this system the poorer scholars are "unduly hurried"? Does Mr. Harris say that they are strained to the utmost—are dragged, as it were, over the ground, without having time to digest it as they should, and so become discouraged and likely enough drop out of school altogether"? I smile again in view of our experience, so diametrically at variance with this gloomy picture. On the one hand, never had we so little truancy, so little absenteeism as now; never such a per-

vasive ambition, a controlling attachment to school and duty. And on the other hand, and best of all, never had we so satisfactory an approach to uniformity in good scholarship — so great a per cent of redemptions from the drones to the working class. The poorest of each class are learning to good advantage, all the while; the best find ample verge and opportunity for the play of their powers.

This condition of things, rendering it possible to occupy the time of the superior scholars in fruitful study, and also to give the poorer ones a good wholesome stint, which they can accomplish without any undue strain or forcing, while all, at the same time, work together as a class, is brought about by an adjustment of the studies, which may be described, in a homely way, as "a circle within a circle." The inner circle represents the essential fundamental work which is prescribed to be thoroughly accomplished by all the class. The outer circle represents a broader field of study, either illustrative of or supplementary to that of the inner circle, which all are expected nominally to engage in, but from any test work as to which the weaker minded can quietly be released, just in proportion to their incompetency to master it. Our standard is, not the glorification of the school, not the surpassing acquisitions of a few, but "the greatest good of the greatest number." And the result amply justifies our methods. It is as admirable as it is astonishing to find, by letting the poorer scholars work along side by side with their original mates, not souring them by rebuffs, not destroying their self-respect or paralyzing their ambition by keeping them back, how much they will gradually acquire; how often, indeed, their indifference becomes charmed away, their dormant faculties roused to activity, and an honorable career substituted for one of neglect and demerit.

But I am occupying too much room. I must be content with these simple statements. Should the details of our experience prove interesting, I shall be happy to enlarge on them hereafter.

Finally, we are coming to the conclusion more and more completely, and acting upon it accordingly, that it is to the best advantage of our younger scholars that their teachers should be changed very seldom. Our grammar masters are all adopting the method (they have had their untrammeled option in the premises) of continuing a class of scholars under the selfsame teacher through all the four years of progress after enter-

ing their schools, up to the graduating grade. One of our grammar schools, distinguished for its efficiency, has been under this regime for years.

Said one of our oldest and at the same time best teachers to me not long since, "I have unconsciously been working at a loss these many years. I have acted on the impression that it would be beneath me to take charge of the younger grades; and have therefore been allowed by my Principals to remain constantly with the sixth grade—changing classes, therefore, every year. But two years ago, I took a ninth grade class as an experiment, intending to carry it forward through the school. And what power I have acquired through my prolonged intimacy with them, such as I never enjoyed before! What a leverage I have over them through my knowledge of their peculiarities! How intelligently I can address them! How successfully I can undertake that special effort with individuals which is so necessary in both a mental and moral point of view! I will never make so sad a mistake again!"

"Yes", I replied, willing to draw her out; "but if this system of continuing a class for years under a single teacher is to prevail, then a class which may happen to come under a comparatively poor teacher will never have the enjoyment of the best instruction."

"Mr. Superintendent", she rejoined, "you have no business to employ any comparatively poor teachers!"

I was answered. I succumbed. Her remark is eminently suggestive. Sure it is that if our schools could only possess the best of teachers, all our disputes about systems would be no better than idle wind. H. F. H.

EXPERIMENTAL NOTES.—III.

EXPANSION BY HEAT.

This can be best shown in case of solids by the selection of substances having a high coefficient of expansion. Fortunately two of the commonest metals, lead and zinc, have the highest coefficients, that of lead being almost exactly that of zinc and more than twice that of iron and fifty per cent greater than that of brass. A well-known method for showing expansion may be easily applied in the case of lead. A ball of lead one

and a half or two inches in diameter is cast, with a piece of wire to serve as a hook. It is turned or filed until it is as nearly spherical as possible. A circular hole through which it will just pass, is cut in a sheet of brass, copper, or zinc. If the ball be heated it will be enlarged by expansion so that it will no longer pass through the hole. Lead has the double advantage of having a high coefficient of expansion and of being easily worked by anybody.

A very pretty device for showing expansion of zinc may be constructed as follows: Obtain a long strip of zinc which will reach from the ceiling of the room to within a foot of the top of the table. This can be easily made by cutting strips from common sheet zinc and soldering them together. The strips should be at least one half an inch wide. Fasten one end of the strip securely to the ceiling by attaching it to one of the strong iron hooks, two or three of which should be in the ceiling of every school room. To the lower end of the strip is attached by wires a small platform, three or four inches square, made of wood, and strong enough to hold by a wire or string from its centre a weight of about ten pounds. The lower end of the zinc strip is cut off square, so that it may rest, when stretched by the weight, upon the short arm of a long lever, the long arm of which is to be used as an index to indicate the expansion. This lever may be made out of a strip of brass, a few inches in length, the short arm being as short as possible, say from a quarter to a half inch, and the long arm made by fastening to the other end of the brass strip a long light pointer of wood, or a straight straw. This should be two feet or more in length—the longer the better. A graduated scale may be attached to any support, near the end of the index, to indicate the amount of motion. The apparatus being in readiness, place an alcohol lamp upon the platform, and light it. The column of heated air rising about the strip, will cause it to expand so that the index may be made to pass over several inches. The apparatus, if well put up, may be used as a kind of metallic thermometer. If the scale be graduated to millimetres, the position of the index may be read at different times in the day, and compared with the readings of a common thermometer. It is easy to see that such a thermometer offers extraordinary facilities for self-registration. Lecchi's Meteorograph is a thermometer of this kind, with a strip of metal between fifty and sixty feet in length. A tube, as a piece of tin spouting, surrounding the

strip of metal will increase the effect in the use of the lamp by confining the heated air to the vicinity of the metal. A piece of rubber tubing stretched to two or three times its length by the weight, and substituted for the strip of metal, will *contract* when the heat is applied.

It has long been known that when a metal is compressed heat is developed, but when a metal wire is stretched cold is developed. A remarkable exception to this rule occurs in the case of India rubber, which, when stretched, develops heat. Prof. William Thompson *predicted* from this that a piece of stretched rubber would contract upon being heated. This was verified by Joule. (See Tyndall's "Heat as a Mode of Motion": Lecture III.)

By the use of the little battery, described in the first of these Notes, a very pretty arrangement for showing expansion may be made. A brass, copper, or iron rod, a foot or two in length, is supported in a frame so that one end is in contact with a metallic point, and the other not quite touching another metallic point, the distance being adjustable—a common screw answers very well. These two metallic points are put in connection by wires with the battery and a telegraph sounder or a bell magnet, or if one of the wires is made to run directly over and parallel to a magnetic needle, the result will be shown very nicely. A lamp is placed under the rod, and in a few minutes it will so expand as to complete the circuit by touching the second point, which will be indicated by the striking of the sounder, the ringing of the bell, or the swing of the magnetic needle. This may be adjusted so delicately that the mere contact of the hand will produce sufficient expansion to complete the circuit and signal the fact. It is useless to say that interesting practical applications of this may be made in the way of fire alarms, and in many other ways.

Ohio A. & M. College, Columbus, O. T. C. M.

——LIFE surprises and overpowers us with the knowledge which it gains; the book, impassive, waits our convenience; the teacher, superior to us, perfectly prepared in comparison with us, consults our necessity, and with his living speech uses a gentle force to which we can yield without losing our freedom. Listening is easier than reading.—DR. CARL ROSENKRANZ.

OUTLINING.

Outlining is somewhat of a science. It involves certain technicalities for which names must be furnished and certain principles which may be systematically presented. For this purpose I have prepared the following outline of outlining. I hope it will be found useful to teachers in helping them to what I consider one of the *healthiest* methods of giving instruction.

OUTLINE OF OUTLINING.

A. Outlining.
  A. Definition.
  B. Systems.
    (a) Brace. (b) Position. (c) Figure. (d) Letter. (e) Composite.
  C. Nomenclature.
    (a) Notation.
      a. Brace. b. Rank-letter. c. Index.
        aa. Arms. aa. Ordinal.
        bb. Apex. bb. Coördinal.
    (b) Ordination or Ranking.
      a. Superordinate. b. Coördinate. c. Subordinate.
  D. Divisions.
    (a) Definition.
    (b) Partition.
    (c) Division.
    (d) Exemplification.
    (e) Comparison and Contrast.
    (f) Narration.
    (g) Applications.
  E. Use.

DISCUSSION OF THE OUTLINE.

A. DEFINITION. Outlining is the process of arranging in systematic order the heads and subheads of any theme. It is an invaluable aid to literary composition. It is an indispensable auxiliary to thorough investigation, and so should be used as an aid to study. It is the best means in the hand of a teacher to test the *power* of thought and thoroughness of mastery obtained by a pupil in the study of any subject.

B. SYSTEMS. (a) The method of outlining by *Braces* is familiar to every one. The apex of a brace points to the heading, the subheads of which the arms of the brace are made to embrace.

(b) The *Position* system ordinates by placing coördinates vertically and subordinates underneath and to the right of their respective superordinates. The outline of "Table" in my last article was after this method.

(c) The *Figure* system employs figures in connection with the Position system to ordinate the headings. If in the above outline I had used 1^1 instead of A, 1^2 instead of A, 2^2 for B,

1^1 for (a), 2^3 for (b), and so on, I would have employed the figure system. The figure with its exponent is called an *Index.* The figure is called a *coördinal;* the exponent an *ordinal.*

(d) The *Letter* system employs letters, called Rank-letters, in connection with the *Position* system to designate the rank of heads and subheads. This is exemplified in the above outline.

(e) The *Composite* system takes the Position system as its base, and employs any or all of the others according to the nature of the space or paper used.

c. NOMENCLATURE. Under this head I have embraced the technical terms used in the different systems.

(a) The *Notation* of any head is the letters or figures which it is necessary to give, in order to show the relation of that head to the theme. For instance, the notation of the head "Notation" in the above outline is A. c. (a); of the head "Applications", A. D. (g); of the head "Coördinal", A. c. (a) c. aa.

a. In the Brace system the Notation is entirely by Braces. A brace consists of aa. Arms and bb. Apex, which I need not explain further. The arms of a brace may be extended in any direction and at any length, providing the apex points clearly to the head which is subdivided.

b. The Rank-letter is the letter or letters belonging to any head. The rank-letter of "Nomenclature" is c; of "Apex" is bb.

c. *Index, Coördinal,* and *Subordinal* are explained above. See (c) *Figure* system.

(b) The term *Ordination* is explained by its equivalent *Ranking.* In ranking head and subheads, a. *superordinate* is used to designate a head in its relation to its subordinates; as, "Nomenclature" is superordinate to or a superordinate to "Notation." Any head higher in rank than any other head is superordinate to that head.

b. Heads are *coördinates* when they are of equal rank; as, "Arms" and "braces" are coördinates.

c. Heads are *subordinate* to another head when they are inferior in rank to that head; as, "Ordinal is subordinate to Index.

D. DIVISIONS. These are the main heads to be used in the outlining of subjects. While all of these heads can not be used with every subject, the most of them can. They are suggestive of the main lines of thought, to be taken in the discussion of any theme. For instance, if Table is a theme upon

which I wish to write, I will first outline it, using these seven divisions for my main heads. I would indicate in my outline first that it should be defined by the head Definition; second, that its parts should be given by the head Partition; third, that the *kinds* of table should be given by the head Division; that some good example of a table should be mentioned by the head Exemplification; that a table of the poor man should be compared with that of a rich man by the head Comparison and Contrast; that the history of tables should be given by the head Narration; that the uses of tables should be given by the head Applications. Of course in my outline of Tables, these main heads would be divided and subdivided so as to indicate the points I wished to touch under each head. After thus outlining *Tables*, it can be readily seen that to write an essay upon Tables would be very easy.

E. USE. As has been indicated in the definition, outlining in the hands of the student is useful as an aid to literary composition, and to thorough investigation. But it is its usefulness as a method of teaching which I desire most to urge. I have used it continually and successfully to secure from my classes the most enthusiastic work and thorough investigation. So have my fellow-teachers here I know, and elsewhere, I doubt not. Its proper use to this end is of such importance, I would prefer to discuss it at greater length than the limits of this article will allow, yet I would like to offer the following:

To master any subject requires (1) that we should understand its principles; (2) that we should know its facts. The first is the more important requisition. It really includes the other. It is the surest and quickest route to the other. A man who understands the principles of any subject is more likely to retain its facts and apply them intelligently, than one who has merely memorized the facts without regard to principles.

Right here is where many af our schools *fail*. The demands of examinations tend to direct all teaching to the memorizing of facts at the expense of the mastery of principles, and so to produce *mechanical* memories rather than *relational* memories. While I would not say that a mechanical memory is not useful, I do think that in cultivating mechanical memories alone we may and do cultivate stupidity—a result which could not be produced in cultivating a relational memory alone. Hence the latter is the safer extreme.

Now it is by this method of outlining that relational memo-

ries are formed. By outlining, pupils are taught not only to discover facts by their logical relations, but to remember them by such relations. By outlining, pupils are made thinkers rather than memorizers—assimilators rather than absorbers. But, most of all, by outlining, pupils form the invaluable habit and discover the indescribable joy of investigating—something from which the memorizing methods utterly exclude them.

N. N. School, Lebanon, O. R. H. HOLBROOK.

HINTS FOR YOUNG TEACHERS.—II.

THE FIRST DAY—ORGANIZING.

The first day is the most important of the whole term. An error on that day is like an error at the beginning of a long example. It keeps increasing, and is very large at the close. It will probably be the easiest or the hardest day of the term; the easiest if you commence wrong, the hardest if you commence right. It is far better that the scholars go home the first day feeling that they have a strict teacher, and have them like you the last day, than for them to go home the first day praising their good-natured teacher, and feel the last day that their school has amounted to nothing. It is a great mistake in teachers to suppose that they can get the good will of their scholars by being easy with them for a day or two. The good will that is won by being easy will be lost as soon as you begin to be strict.

Have your plans made out before hand, that you may neither show indecision nor make serious mistakes. If you do either, the scholars will lose confidence in you.

Be at the schoolhouse before any of the scholars are there. As fast as they come in, take their names and the studies which they wish to pursue. If the number of scholars is small, you can examine each one separately and assign him to such classes as you think best, after ascertaining his preferences and his attainments. If the number of scholars is large, spend the time devoted to recitations the first day in examining by classes. This will give you a general idea of the advancement of the school, and enable you to promote or put back at once those who have entered classes above or below their ability.

The first day is a good time to make general remarks to each class about the study it is pursuing, and the manner in which the lessons are to be learned. If a class is taking up a new study, as grammar or geography, speak to them of the object and importance of the study, its relation to other branches, and the benefit a thorough knowledge of it will be to them.

Whatever rules or general regulations you wish to adopt, should be made known the first day. It will be much more difficult to put them into operation if you wait until the second or third day. Let your rules and the reasons for them be plainly understood at the outset. Sometimes, however, you can not tell at first all the regulations that will be needed.

You may have but a very few scholars the first day, but carry out your plans just as though you had a full school.

As soon as your classes are all arranged, which may not be for several days, post in a conspicuous place a programme of all the school exercises, and faithfully abide by it. The following programme will serve as a guide, though probably no one teacher will be able to use it without many changes. There is much difference of opinion and of practice as to when the different classes should recite. I simply give, without stating reasons, what seems to me the best plan for the average district school. It will need modification in each particular school.

Forenoon.	*Afternoon.*
Opening Exercises..... 9 — 9.10	General Exercises (See Sec.) .....1 —1.10
A-B-C Class ..... 9.10— 9.15	A-B-C Class.....1.10—1.20
First Reader..... 9.15— 9.30	First Reader.....1.20—1.30
Third Reader..... 9.30— 9.45	Third Reader.....1.30—1.45
Fifth Reader ..... 9.45—10.05	Geography (Advanced)...1.45—2
A-B-C Class .....10.05—10.10	Geography (Beginning)...2 —2.15
Mental Arithmetic .....10.10—10.25	A-B-C Class .....2.15—2.20
Boys' Recess .....10.25—10.40	Writing.....2.20—2.35
Girls' Recess .....10.40—10.55	Girls' Recess.....2.35—2.48
Arithmetic (Beginning Class) .....10.55—11.15	Boys' Recess .....2.48—3
Arithmetic (Advanced Class) .....11.15—11.40	Grammar (Beginning).....3 —3.20
Spelling (Third Class) ..11.40—11.50	Grammar (Advanced) .....3.20—3.40
Spelling (Second Class).11.50—12	Spelling (First Class) .....3.40—3.55
	Closing Exercises.....3.55—4

CLASSIFICATION.

It is sometimes the case that a school has as many classes as it has scholars. This is a great evil. When there are twenty or thirty classes for one teacher to hear, the work will necessarily be done in a very superficial manner. *Aim to have as few classes as possible, and to put each pupil just where he belongs.* Do not be arbitrary about it. Reason the matter with the children

and, if necessary, with their parents. Show them the necessity of a thorough classification. Kindly expose the false pride which would keep them from going to a lower class when their own good and the good of the school demanded it, and the false economy which would keep them from buying a new book when the same reasons made it necessary. Be firm and patient and kind, and you will overcome opposition.

If you have not time to examine each pupil separately the first day, examine them by classes, and then promote or put back individuals as may be necessary. Continue the process of sifting until all are properly classified. It may be necessary to put a whole class back toward the beginning of the book. In such a case make it clear to them that that is the only way for them to get on most rapidly in the study. When individuals are put back, do not announce it to the class or school, but see them about it privately.

There should be but three classes in reading above beginners. Often two classes are enough. It is not necessary to have more than one or two classes in spelling, besides those who spell from their readers. In the average district school (it is such that I have constantly in mind), there should not be more than three classes in each of the three studies, arithmetic, grammar, and geography. The classes should average twenty minutes each, and more if the time can possibly be found.

In common schools no two scholars will have the same degree of advancement, and, in reducing the number of classes, you will probably bring into the same class pupils of very diverse attainments. The evil must be met and overcome, as far as may be, by tact in hearing the recitation, and by diplomacy in persuading dull scholars to drop, and bright scholars to take up other studies or other work.

The plan of allowing advanced scholars to hear the lower classes recite is a poor one, but it is often better than the alternative of crowding each class into a very few minutes. You will occasionally have scholars who can hear some classes recite as well as you, perhaps better. But they should be employed with discretion. Allow them to hear those classes that require the least skill and judgment—those in which there is most routine work.

Hamilton, N. Y. R. T. Cross.

THE INTERVAL BETWEEN CLASSES IN GRADED SCHOOLS.

FRIEND WHITE: I have read with something of astonishment Mr. Harrington's article in your November number, which is supposed to be an answer to a system of "Mobility in our Graded Schools", favored by Messrs. Pickard, Harris, and others, and with which you have also coupled my humble name. His argument is clearly leveled at an evil—supposed, very naturally, to result from a system the existence of which I can hardly conceive. The system he combats implies a regular flow of all the classes of a system of schools from one room to another once in five months, even once in ten weeks with change of teachers at each step upwards. I do not so understand the plan proposed. It certainly does not correspond with the practice sought to be initiated in the schools of this city, and my purpose will be accomplished if I succeed in placing the system in a clearer light before your readers.

The proposition is to secure to the few pupils who can advance more rapidly than the others in their class the opportunity of doing so by steps shorter than a year; also of enabling the teacher to send from her class to a lower one, such pupils as do not, can not keep up with the average pupil, without sending them, in all cases, back a year in the system. It also recognizes the fact that some thousands of pupils taken at random can hardly be grouped into classes differing in attainments and powers by just a year's growth, or whose differences can be so nearly measured by this quantity as to remove the supposition that additional subdivisions would conduce to greater convenience and better results. The plan proposed here is as follows: Suppose a twelve room district building in cities of 20,000 inhabitants and in larger cities. In these buildings we find the six grades below the grammar schools, designated as year one, year two, year three, year four, year five, year six, a classification which all can comprehend. The *common* plan is to have two schools, or rooms, of each grade, with a year's course between each two grades. The plan *proposed* is to organize these schools at first with but half a year between each by grading the pupils more closely; half the classes being promoted in February, and half at the end of the school year. Thus, after the system is established, classes remain with their teacher a year. Under this plan any teacher may, when de-

sirous, advance a pupil, without occasioning much, if any, omission of work, or much extra study. He may also reduce a pupil in order to allow the average class to move more freely or rapidly, and do no injustice to the weaker pupil, whom, rather than set back a full year, he would be greatly tempted to retain in the class to the disadvantage of pupil and class alike. The grammar schools, more sparsely scattered about the city, each receiving supplies from two or more district buildings, can, without inconvenience, have each distinct class occupying the recitation seat at a given time, five months in rear or advance of another which occupies the seat another hour. The chief difficulty is in such general matters as spelling and writing, and the course of instruction in such branches may be so arranged in these advanced grades as not to repeat the same matters in any one year. The necessities arising from these semi-yearly classes may at times determine in which of two buildings a given class shall find its grammar school to attend, just as attendance upon German schools, schools of design, etc., may do. In the high school less difficulties still result from this plan. One or two buildings, in all but four cities in the West, and scarcely in more in the East, one building accommodates all the classes of the high school. Wherever these classes are large enough to divide, they may as well be divided according to advancement as in any other way. The class that comes to the point of graduation in February, may then either graduate or select extra studies at the proper time, and continue until June. In many cases the system of *elective studies* in the high school will easily lead to such classification of pupils, as at the same time to merge the classes which entered at the different seasons of the same year, before they reach the senior year, and to obviate the evils which our system aims to cure, the diplomas being graded according to the studies pursued, or containing a list of such studies. Of course this plan will not work where classes are not large enough to divide in accordance with its requirements, nor can I see how in other cases Mr. Harrington's imagined plan could exist except in imagination. To a wider range of schools a system of elective studies more or less expanded may be applied. But even this important feature of a complete school system must yield to obvious and absolute necessities.

As to the feasibility of the plan of classification here described, it has been my practice during the part of the last

twenty years in which I have been connected with schools, to arrange as many grades in distinct buildings, as the buildings would admit of, up to the limit I have indicated above. This has occasioned inconvenience at certain points when the plan could not be pushed through the whole system. But I believe that even this partial use of the plan, is better than the loose grading implied in the plan of exclusively yearly classes. I have even preferred to have two grades in one room than to drag along pupils unfit to go on, or to keep back those able to advance. Each community must follow its own convictions in such cases. But I have no doubt as to the relative value of the plan where it can run through the whole system, or even *into* the first years of the high school. To this extent, at least, the plan is applicable to a score or two of places reached by your valuable journal. D. F. DeWolf.

Toledo, O., Nov. 20, 1874.

PROPER SCHOOL INCENTIVES.

The subject of proper school incentives, without doubt, furnishes one of the most difficult problems for the teacher to solve. Many different views are held upon this subject, and many of them may be supported by good arguments. But too often, we fear, the teacher is looking only toward immediate results rather than consulting the future good of the pupils involved. The pressure brought to bear upon many of our teachers by the so-called per cent system has a tendency to urge them to use incentives which will serve the present only, and in the end work injury to the best interests of the school.

One plan which is sometimes resorted to even in this advanced age of education, we feel obliged to condemn. We base this condemnation not alone upon our experience as a pupil, nor our observation and experience as a teacher, but also upon the results obtained by many eminent educators who have preceded us, and who have left their record to prevent us from being betrayed into mistakes and dangers from which they barely escaped. This custom, which we believe to be so pernicious to the best interest of pupils, is that of detaining them after school to do the work not properly done in school time; to study unlearned or poorly prepared lessons. This habit, we

think, will in the end tend to make them dislike more and more the subjects so studied.

Our best students of human nature have laid down as a principle, that we should never allow anything, which we desire our pupils to become interested in and to love, to become connected in any way with the idea of punishment. These being associated, the mind of the pupil naturally turns with dislike to the work which is required as a penalty; regarding it as the cause of punishment rather than the want of application, which is the true cause. Hence that in which we wished him to engage with interest, becomes anything but agreeable. We grant that instances may be found where some may have been benefited by such a method; but where one such case may be instanced, fifty may be found where the results have been unsatisfactory and even detrimental to the intellectual and moral education of pupils.

Again, we believe that the tendency of this method of treating *dull* and delinquent pupils alike, is to cause them to dislike not only their books, but the tëachers and the school, and eventually to drive them from the privileges of the school, where, in justice to themselves and society, they should be retained as long as possible.

We earnestly ask teachers, who may have adopted this practice, to carefully consider the question in its bearings upon future results, and we feel assured that they will arrive at the conclusion that the practice is contrary to good management, and tends to evil rather than good. E. H. C.

—— THERE must be many who hear me who can not remember when they could not read. I am sure I can not. We ought to strive to come as near that as may be in the Primary schools, and then should give the scholars the best of all they can understand. I would choose first the classics of childhood: Robinson Crusoe, Grimm's Fairy Tales, the Arabian Nights, and along with them the stories of gods and heroes, the Mythology, the legends and traditions of History, ancient and modern, and I would take care to put within their reach, as the privilege for spare hours, Pilgrim's Progress, Don Quixote, and Shakspeare. I would even have the Iliad and Odyssey(illustrated) in every primary schoolroom.—MRS. A. C. MARTIN.

EDITORIAL DEPARTMENT.

——The many friends of the editor will be glad to learn that after months of severe suffering he is now, to all appearance, convalescent, coming up slowly from the bank of the river freighted with those deep and rich experiences which come to us only in the chamber of sickness. It will yet be some time before he will be able fully to resume work.

W. E. M.

——In this number we give the conclusion of the able article of Supt. Harrington, of New Bedford, Mass., on class intervals. The whole article should be read together. It is worthy of careful consideration as the mature result of thought and experience. It is obvious, however, that Mr. Harrington has in mind a very different system of gradation and of tests of proficiency from that in common use, at least in our western cities. His own plan, not a theory, but actual and in use, he develops in pages 474–5 of this number. It is worthy of careful study, because it is backed by actual experience, and declared to have obviated some of the most formidable objections urged against our system of annual promotions, *e. g.*, the keeping back of the bright and intelligent; the dragging beyond their depth of the dull and slow; and witbdrawals from school on account of the failure to be promoted. Experience is always of more value than theory—and figures do not lie. If Mr. Harrington has found the true way to do "the greatest good to the greatest number", he has solved the problem of the public school. But he would make terrible work with averages and percentages! In the continued inability of the editor to redeem his promise of last month to notice the article in this number, we are inclined to rest the question for the present in his closing remark: "Sure it is that if our schools could only possess the best of teachers, all our disputes about systems would be no better than the idle wind."

——It is hastily assumed by many that the high school is of benefit only to those pupils of the common schools who reach its grades, and these are always a very small percentage. It is opposed as an expensive provision for the education of a few. It is denounced as securing to the few what the many can not attain. But if the high-school course is wisely arranged, and built upon the studies pursued below, its highest advantage to the community is not seen in the small numbers who are found in its classes, and the still smaller number of its graduates, but in its reflex influence upon every grade below itself. Every pupil in the primary and grammar grades is a possible candidate for the high school. Every promotion is a step toward the high school, not in time only, but

chiefly in proficiency in the studies fundamntal to that course; and so from the A-B-C upward every grade is more thorough for the fact that there is a standard by which their work is to be measured, and this advantage is reaped by all, even by those who drop out of the school at a very early period. Economy in money might possibly be secured by abolishing the high school; but economy in results, getting the best return for the money expended, would be sacrificed. There is, undoubtedly, danger of shaping the lower grades so exclusively and ridgidly by the prospective claims of the high school, as to force many dull or unfortunate pupils out of the school by refusing them promotion; but this a wise and humane superintendent will always guard against, even at the expense of uniformity in his system. He will care with paternal solicitude for the class who most need all the benefits the common school can give them, and see that they are not sacrificed to procrustean rules. At the same time he will secure the best results for them and for all by a high school, fully up to the capabilities and demands of his community, crowning and binding together his system.

—— THERE is a very sensible article in *Littell* for July 25, 1874, taken from the *Victoria Magazine*, on "the rights of children", from which we quote this parpraph:

"The child has a right to ask questions and to be fairly answered; not to be snubbed as if he were guilty of an impertinence, nor ignored as though his desire for information were of no consequence, nor misled as if it did not signify whether true or false impressions were made upon his mind. He has a right to be taught every thing which he desires to learn, and to be made certain when any asked-for information is withheld, that it is only deferred until he is older, and better prepared to receive it. Answering a child's questions is sowing the seeds of its future character. The slight impressions of to-day may have become a rule of life twenty years hence. A youth, in crossing the fields, dropped cherry stones from his mouth, and in old age retraced his steps by the trees laden with luscious fruit. But many a parent whose heart is lacerated by a child's ingratitude, might say:

'The thorns I bleed withal are of the tree I planted.'

To answer rightly a child's questions, would give scope for all the wisdom of the ancients; and to illustrate needed precepts by example, would require the exercise of every Christian virtue."

—— THE question is often asked of instructors at teachers' institutes, and is often brought up for discussion at district and county associations: "How shall we interest our pupils in the study of grammar, arithmetic, geography, or any other particular study that may have caused considerable difficulty?" We have generally found, upon investigation, that the difficulty was not so much a lack of method as a want of interest in the given study. If any teacher desires to interest a class of pupils in any subject, he needs first to be deeply interested in it himself. Those teachers who seek to interest themselves in *all* that they are called upon to teach, even though they may not possess a *natural liking* for each particular study, will not fail to interest their pupils, even if their method is not of the most approved style. Interest will beget interest.

E. H. C.

COMPULSORY EDUCATION.

"The Supreme Court of Wisconsin has decided that parents have the privilege of limiting and naming the studies their children shall pursue in the public schools, subject to the limitation that they shall designate such studies as are taught in the schools."

We find the above paragraph in the public press, and suppose it to be true. The decision is so equitable in itself, that we can only marvel at the obstinacy which permitted the question to come before a judicial tribunal. Certainly parents have some rights which school boards are bound to respect. Among them is the right to determine what studies of those provided for, their children, if competent, shall pursue. System and symmetry in courses of study are of great value, indeed are indispensable; but they may become an unendurable tyranny by imposing on pupils more than for any good reason they are able to bear. A pupil who, for any reason, may be able profitably to pursue three or four of the studies of the grade to which he belongs, ought not to be compelled to study nine or ten, and so by reason of failure in health, or in standing, to leave the school. A pupil, whose stay in school must be limited to a very few years, ought not to be compelled to divide his attention with studies whose whole educational value depends upon their being pursued beyond the point to which he will ever attain in the school.

On the other hand, a pupil should be permitted to concentrate himself upon the studies which are fundamental to the end he has in view, or upon those which, feeble in health as he may be, or dull in intellect, he can master with profit to himself and to the state. The humblest child in a school is of more value than a system rigidly perfect. To adjust things to the capacity of the pupil may perhaps derange averages; but the best possible education of the feeble or neglected one is a higher triumph than averages of even a hundred per cent. The system which makes large averages by the slaughter of the feeble and "the survival of the fittest", is not the highest triumph of the common-school system. The true mother nurses with tenderest care her least favored one, and fits her regimen and her diet to its necessities and ability.

COEDUCATORS.

Many good results are supposed to have been secured by the coeducation of the sexes in the higher institutions of learning. Those who have tried the experiment most thoroughly, seem to be the best satisfied with the results. Perhaps the strongest argument in its favor is, that it is the method indicated by God in the structure of the family. The same argument applies with equal force to coeducation by the sexes. God commits the training of the child in the family to both parents, and ordinarily great evils are sure to follow if either neglects the trust. The dual unit of the human race—the "one flesh" which forms the

head of the family—has very diverse qualities, which are meant to be impressed upon all its offspring.

"For contemplation he, and valor form'd,
For softness she, and sweet attractive grace."

The teacher stands *in loco parentis*. It becomes a grave question, therefore, whether the most perfect results can be obtained by educators exclusively of either sex. So far as instruction goes, it matters nothing. But education, on the whole, is largely the impress of what the teacher is, as well as what he knows. It is essential to our young men and maidens that they look out upon life from the standpoint of manly ambition and enterprise, as from the standpoint of womanly aspiration and sentiment.

Our object is not so much to argue the question, however, as to call attention to the fact that in the cities, at least of Ohio, a very small proportion of the pupils of our public schools are ever under the instruction of male teachers. While the whole number of teachers employed in the state last year was 21,899, of whom 9,789 were men and 12,110 were women, the number of teachers employed in city, village, and special district schools was 980 men and 3,185 women. This ratio rapidly increases as we come to the larger cities. The five great cities of the state employ as superintendents and teachers 133 men and 1,027 women. Cincinnati has 70 men and 455 women; Cleveland 29 men and 289 women; Toledo 12 men and 105 women; Columbus 9 men and 104 women, and Dayton 13 men and 74 women. Of the 133 men, 88 are designated as high-school teachers. Of the remaining 45, the greater part are superintendents, principals, and special teachers. It is probable that in the five cities named, not a pupil of the grades below the high school ever comes under the care of a male teacher, save for the half hour of some special instruction! It is avowedly an experiment, and an experiment chiefly in the interest of economy. It deserves a fair and impartial trial, but with an eye ever upon the results. If as good results are obtained by women exclusively, teaching at an average of $35.00 per month, as by men at an average of $55.00, burdened tax-payers will speedily demand that the lessons of political economy be rigidly enforced. But we must be suffered to doubt the wisdom of divorcing the sexes whether as educated or educators.

CLOSE OF THE FOURTH VOLUME.

This number closes the fourth volume of the NATIONAL TEACHER, and, notwithstanding the illness of the editor during the closing months of the year, no previous volume has been more highly commended by teachers and school officers. We have largely depended on our readers, who know the merits of the TEACHER, for an increase of its circulation. May we not continue to depend on their efforts in its behalf. The next volume will begin with the January number, and will be opened with the earnest endeavor to make it better than any of its predecessors.

EDUCATIONAL INTELLIGENCE.

—— The new postage law requires all publishers to prepay postage on newspapers and magazines after January 1st, 1875. The price of the Teacher is too low for us to prepay postage, and so we have increased our subscription price to $1.60 for single subscriptions and $1.35 for clubs, the additional ten cents being for postage.

—— The editor has been able to give but little personal attention to the editing of this number. He is indebted to Rev. Dr. Moore for the preparation of most of the articles in the editorial department, and to Prof. E. H. Cook for the items of educational intelligence.

—— Mr. L. S. Thompson, superintendent of drawing in the public schools of Sandusky, can be secured to give a lecture or a course of lectures upon "Art and Art Education" during the coming lecture season.

—— We wish to call the attention of institute and lyceum committees to the advertisement of Prof. Theo. B. Comstock, who has recently located at Cleveland, and comes well recommended as an instructor and lecturer in the natural sciences.

—— In 1873, 38,875 persons were preparing for college, of whom 2,965 were in the public high schools, 10,745 in academies, and 25,165 were in the preparatory departments of the colleges themselves.

—— There are now twelve states with compulsory educational laws, viz., New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Michigan, Kansas, Texas, Nevada, and California.——Thirty Chinese students are on their way to Hartford, Conn.

—— The total number of persons between 12 and 21 years of age in Chicago unable to read and write is only 186.——The proposed change in Chicago High School management, by which the pupil would study at home and only recite at the school building, has been defeated in the Board of Education.

—— An exchange says that the trustees of the Peabody Educational Fund express their decided conviction that, while equal advantages and opportunities for public instruction should be given to children of either color, compulsory legislation of Congress in favor of mixed schools in the South would be most pernicious to the interests of education in the communities to be affected by it, and more disastrous to the colored population than to the whites.

—— We have received from Milton Bradley & Co., Springfield, Mass., four boxes of instructive and pleasing games, entitled "Bible Characters and Events", "American History, or Patriots of the Revolution", the "Corona, or Game of the Banner and Crown", and the "Figuro." The cards are printed in an attractive style—those of the Corona being illustrated, and those of American History containing vignettes of the

most noted characters in the earlier history of the country. Either of these games would make an admirable holiday present.

—— THE legislature of California has passed a law forbidding the making of any difference in the salary of teachers in the public schools on account of sex.——The Wheeling (W. V.] Board of Education are agitated by the question whether parents have the right to write notes asking, as "necessary", for the dismissal of their children when they wish them to attend dancing school.

—— THE Superintendent of Public Instruction in Providence, R. I., in his last report declares himself in favor of compulsory education. He says: "One of the greatest obstacles to the successful working of our schools is truancy and absenteeism." He reports in the high school 354 pupils, in the grammar schools 2,999 pupils, in the intermediate 2,142 pupils, in the primary 4,792 pupils—total 10,267 pupils.

VERMONT.—An exchange says that last year there were 91,000 children in the state, of whom 72,000 attended school. The total cost of schools was $737,000. The schools continued twenty weeks. One-third of its schoolhouses are reported unfit for use. There is no high-school system, and cheap teachers are in demand.

MASSACHUSETTS.—We learn that during the past year the results of teaching sewing in the Winthrop school of Boston have been very satisfactory. It is now proposed to have it taught to girls generally in the public schools of the city; the course of instruction will be graded as in any other department.——There are 158 in the freshman class at Harvard, The attendance of the senior class upon recitation is optional this year.——Boston University has 100 students, 49 of whom are young women.——Dr. Miner, of Tufts College, has received a formal request from the faculty to retain his official connection with the College and withdraw from his pastorate at Boston.——The salaries of the teachers in the high schools of Boston have been increased $200 each.

CONNECTICUT.—The State Teachers' Association was held Oct. 22d and 23d at New Haven. We learn that the meeting was large, interesting, and enthusiastic. It was held in the new and magnificent high-school building. The leading papers were—"Waste Labor in Education", by President Chadbourne, of Williams; and "Courses Preparatory to College", by President Porter, of Yale. President Chadbourne's paper discussed the following heads: 1. Waste from imperfect teaching. 2. Waste in the teaching of unimportant things. 3. We should not teach less, but more valuable matter. 4. Needless things should not be learned even for the sake of "excellent discipline." 5. Waste resulting from a wrong classification in schools. 6. Clinging to worn-out methods because successful men have used them. 7. Two sources of waste for which the teacher *is not* responsible: First, that of dullards being sent into high classes, who can never succeed; second, the fault of parents in suffering pupils to be absent much from school, or to enter late in

the term. 8. Two sources of waste for which the teacher *is* responsible: First, want of enthusiasm in teaching; second, neglect of inculcating essential moral principle with the other instruction. It is needless to add that all of these topics were handled in an able and instructive manner. President Porter condemns the "high pressure" system prevalent in many of our preparatory schools, and argues that it results in mechanical habits of thought. He regards as pernicious the growing tendency in these schools to trust in special examinations. "A third pernicious feature is a tendency to rely on system and method, and the various paraphernalia of a well regulated institution to the exclusion of individual and personal effort. It is easy to ask routine questions, to record, the result in a marking book, to clinch the week's work by an examination, and a term's and year's work in like manner; far easier than to put questions in such fashion as to find whether the scholar has got at the essence of knowledge, or in such fashion as not only to reach the ear of the questioned pupil, but to thrill with subtle and suggestive power the whole class. But the real power lies in oral instruction—in the living and vivifying force of the contact of mind with mind. Oh! there is no such power of man over man as that of the mind or a thrill with truth, and imparting it with all the force of his individuality! I would never be a teacher, if that meant only to turn the handle of never so delicate an organ that went by machinery. I would not be a teacher if all my work was to preside at recitations, put well-rounded questions, and conduct skillfully questioned written examinations."

Pennsylvania.—B. F. Shaub, County Superintendent of Lancaster county, informs us that at their recent county institute there were 540 actual members. The receipts were $1,400; expenditures, $1,150. Prof. Northrop, of Conn., who was present, said it was the largest one he ever attended in America. We have a personal acquaintance with Prof. Shaub, and know him to be energetic and earnest in the cause of public education.——A rule has been adopted in Philadelphia, forbidding study by the pupils out of the regular school hours.——A large number of county institutes are to be held in November and December.——A very successful institute was held at Doylestown, Bucks county, in November. Special attention was given to the consideration of a course of study for country schools. Supt. Eastburn is doing an excellent work.

New York.—The enemies of the public school system are making an attempt to reduce the pay of teachers in New York City seven per cent, urging as a reason that teachers can be obtained at the reduced salaries. ——A committee of the Elmira Board of Education has reported against such incentives as are common in our higher schools, including prizes, class honors, etc., regarding them as causes of many physical ills common among children.

Compulsory Education in New York.—The act for compulsory education passed last May by the New York Legislature goes into operation on the 1st of January, and its results in the city of New York will be watched with great interest. The rapid growth of opinion upon the

subject is shown by the fact that only seven years ago the Committee on Education in the Constitutional Convention did not think it worth while even to suggest the proposition, so little sympathy and support did it receive. But the experiment is now to be tried, and the sagacious enforcement of the act can not fail to have very important consequences. The bill provides that every child of the proper age shall be instructed in reading, writing, spelling, English grammar, geography, and arithmetic for not less than fourteen weeks in every year; and any employer who violates the law by preventing the school attendance of any child, is to be fined fifty dollars for each offense. The school trustees are to examine regularly the factories in which children are employed, and to provide text-books when parents are unable to do so. If the parent complains that he is unable to compel the child to attend, the trustees are to deal with him as a habitual truant. The magistrates who are to have jurisdiction are justices of the peace, civil justices, and police justices.

The Board of Education in the city are having a census of the school-children made, This can be thorough and accurate, if proper care be taken, for each police roundsman has a beat of but about three blocks. The necessary details can thus be ascertained: the number of children, their names, ages, and residences; their occupation and places of employment. Those beyond the lines, the street Arabs, have their haunts, and can be brought within the knowledge and supervision of the law. Larger accommodation must, of course, be made for vagrancy, and it may be found necessary to provide some kind of reform schools for the resolute vagabonds. In many of the large English cities the compulsory system has been tried, and with excellent results. At a late meeting of the Social Science Congress a paper was read showing that the increase of the number of children in average attendance at school was about 86 per cent in Birmingham, 100 per cent in Sheffield, 32 per cent in Bristol, 50 per cent in Newcastle, 97 per cent in Hull, 59 per cent in Nottingham. This paper, prepared by Mr. Moss, the clerk of the Sheffield School Board, was full of valuable information. Thus of 100 prosecutions against parents and employers for contravening the act, 75 were the cases, not of poor widows dependent upon their children's aid, but of skilled workmen, some of them able to earn fifteen dollars a week, but given to drink and vice.—*Harper's Weekly, Dec.* 5.

OHIO.—The Stark County Institute was held in Canton from Oct. 26th to Oct. 30th. It was a decided success, and showed great increase of interest among the teachers of the county in the school work. The enrollment was three hundred and fifty-four, being nearly double the highest enrollment at any previous institute held in the county. The instructors were the Hon. T. W. Harvey, on grammar and geography; Prof. John Ogden, of the Ohio Central Normal School, on methods of teaching and arithmetic; Prof. R. B. Marsh, Supt. of Schools at Mt. Vernon, O., on reading; Prof. Jas. A. Brush, of Mt. Union College, on geography; Supt. D. P. Pratt, of Massillon, on history; and Prof. T. Armstrong, of Mt. Union College, on penmanship. Very able evening

addresses were delivered by Profs. Harvey and Ogden, and on Thursday evening Prof. Marsh gave a highly interesting elocutionary entertainment. Supt. Daniel Worley, of Canton, had been expected to give lectures on language lessons, but in consequence of ill health was unable to do so. Prof. Worley, however, did good work in presenting and urging the claims of the MONTHLY, for which he secured ninety-one subscribers. The following resolutions were unanimously adopted:

Resolved, That we indorse the OHIO EDUCATIONAL MONTHLY* as one of the ablest educational journals in the country.

Resolved, That in Hon. E. E. White its editor, we recognize a true friend of the teacher and of education, and that in his present severe illness he has our deepest sympathy. J. H. L.

THE CENTRAL OHIO TEACHERS' ASSOCIATION.—The meeting of this Association, held in Columbus on the 29th and 30th of October, was an occasion long to be remembered by those in attendance. It was the most interesting and enthusiastic meeting ever held by the Association. Addresses were delivered by Commissioner Harvey, president of the Association, and Supt. Hancock of Dayton, and valuable papers were read by Supt. Ellis, of Hamilton, Supt. Jackson, of Springfield, Supt. Ormsby, of Xenia, and Prof. Lewis, of Worthington. The attendance was large, nearly all the leading teachers of central Ohio being present. At eight o'clock on the evening of the 29th, the Association, with a number of invited guests, met at the Deaf and Dumb Institution, and were entertained by the deaf-mutes with a pantomime exhibition. This was followed by an elegant banquet prepared by the teachers of Columbus, under the supervision of Prof. E. H. Cook, of the Columbus High School, chairman of the entertainment committee. The officers of the Association for the coming year are: President, Hon. C. S. Smart, State School Commissioner elect: Vice-President, Prof M. Lewis; Secretary, Miss Julia L. Cummings; Executive Committee, E. H. Cook, W. M. Goodspeed, and J. C. Harper.

INDIANA.—A meeting of State and City Superintendents of Schools was held in Terre Haute, Nov. 18th and 19th. The states of Ohio, Indiana, Illinois, and Michigan were represented by some of the leading school men. The object of the meeting was, in an informal way, to consider some of the most important questions, arising in the management of schools in our larger cities. A few of the subjects discussed were—"How to manage dull pupils? How to conduct examinations? How often should they occur? When and how often should promotions be made?" Much important discussion was evolved upon all of these questions. This informal interchange of opinion and comparison of results obtained in different cities can not but add to the value of the work of those who were in attendance. By invitation the superintendents visited the public schools which are under the supervision of W. H. Wiley; also the state normal school, of which Mr. Jones is the principal. The meeting was regarded by those present as a success, both intellectually and socially.

* The MONTHLY is the Ohio edition of the NATIONAL TEACHER.

MICHIGAN.—The number of students in the University of Michigan last year was 1,112. The experiment of making most of the studies of the senior year elective, thus far has proved very satisfactory. The students exhibit more interest in the studies selected by themselves, and the instruction is better and more thorough, owing largely to the fact that students choose those studies in which they feel an interest. In regard to coeducation, the president says: "I doubt if an equal number of young women in any other pursuit of life have been in better health during the year than those who have been under our roof. The number of women in attendance this year is 94, of whom 5 are in the law department, 38 in the medical, and 31 in the literary: of whom 1 is a resident graduate, 6 are seniors, 8 are juniors, 11 are sophomores, 17 are freshmen, and 5 are select: 21 pursue the classical course, 15 the Latin and scientific, and 6 the scientific. Three of those graduating last year in the literary department, received appointments to speak at commencement."

TENNESSEE.—The report of the Board of School Visitors of Memphis, Tenn., states the whole number of white children of school age to be 6,479; of colored, 3,902; the average white attendance to be 2,892; average colored attendance, 657. President Kortrecht, in his report to the board, refers to the almost insuperable obstacles the board had to contend against during the past year, beginning with the yellow fever scourge, which suspended the schools for nearly two months at the beginning of the scholastic year before they were fully organized in working order, during which two members of the board, four or more of the teachers, and many pupils fell victims. Following this, and a most formidable hindrance to the workings of the board, he alludes to the embarrassment in the collection of taxes, which would have been insurmountable but for the liberal contribution from the Peabody fund at the time when means were most needed to pay teachers and other current expenses. In this condition President Kortrecht says: "We have been aided to accomplish this by a liberal contribution from the 'Peabody School Fund', at a time when it was most needed. Our people do not seem as yet to fully appreciate the value of this grand bequest to aid for all time in the education of the children of the Southern States. But the day will come when it will be appreciated, and when the names of George Peabody, and of his trustees, Dr. Bernard Sears and the others, whom he appointed to invest and distribute his great gift in the common school education of all the children of the Southern States, will be known and reverenced by all for whose benefit it was intended."

SOUTH CAROLINA.—A correspondent of the New York Tribune writes as follows, in regard to the condition of public-school work: "Ample provision is made in the constitution and statutes for funds sufficient to instruct all the children of the state; taxes are levied and collected for that specific purpose; but a large part of the fund is systematically stolen by the executive and legislative departments, and the rest is so misapplied that little good is done. There are twenty-two school com-

missioners, with a salary of $1.000 each, few of whom give any attention to the office beyond drawing their salaries, when the money happens to be in the state treasury, and appointing unworthy favorites to positions, and several of whom can not read or write. In many instances the natural result follows: the teachers are ignorant, unprincipled, and brutal, and the sums paid for instruction are thrown away. Frauds of the most alarming character have grown up in the management of the schools; certificates of service have been given without schools having been taught, and duplicate certificates given almost as often. It is impossible to estimate the spurious claims now outstanding against the state. They probably reach $200,000 or 300,000. The State Superintendent, Dr. Jillson, is a man of learning and honesty; but he can do little with suoh a mass of stupidity and corruption as the commissioners appointed by the governor."

ITALY.—In 1859 in Piedmont and Lombardy there were 350 illiterate persons in every thousand; in Tuscany, 470; in the kingdom of Naples and Sicily, 802. In Sicily among the women 938 in every thousand could neither read nor write. Much has been done since the government took hold of the subject. In 1869 the number of primary schools was 28,490 with 801,202 pupils. In 1872, primary schools 43,380 with 1,717,351 pupils. The education is not as yet compulsory, but the government seems inclined to free, secular, and compulsory education.—— In Italy there are 154 art, technical, and trade schools, with 567 teachers and 13,239 pupils.

BOOK NOTICES.

A SCHOOL HISTORY OF GERMANY. From the Earliest Period to the Establishment of the German Empire in 1871. By BAYARD TAYLOR. Pp. 608. New York: D. Appleton & Co. Geo. H. Twiss, Columbus, Ohio, Agent.

This is a history of the German race from our earliest knowledge of it to the establishment for the first time of the German nation. Necessarily brief and comprehensive, it, however, gives a very satisfactory view of the rise of the people who have exerted so mighty an influence over the destinies of Europe for a thousand yers. The history of the Germanic race is very largely the history of Europe. Mr. Taylor has shown its connection with that of Spain, France, and Italy as he traces the progress of the Gothic kingdoms, of the Frank dynasties, and of the empire. His thorough familiarity with the language and literature of Germany, and his long residence in the native home of his wife, herself an accomplished German scholar, give him peculiar facilities for a thorough mastery of the subject. It is evidently a labor of love. An enthusiastic admirer of the German race, Mr. Taylor is yet a thorough American—an intelligent and candid lover of free institutions. All his sympathies are with the people, as against tyranny, secular or spiritual. In tracing the deadly influences of the Papacy and of Jesuitism, he is singularly candid and honestly outspoken. In dealing with the Reforma-

tion and the fatal wars to which the attempt to suppress it gave rise, he holds the even balance of the impartial historian, and distinguishes between true religion, as the mighty force which leavened the mass, and the hierarchical spirit, which sought to use it for selfish ends. His style is simple and graphic, clear and strong. The book will interest the general reader, while it is admirably adapted to the use of the intelligent teacher, who regards history as something more than a dry detail of names and dates. We hail this book as a valuable contribution to the instruments of an education which shall fit American citizens for an intelligent discharge of their high duties, through an accurate knowledge of the causes which have shaped the destinies and, for a thousand years, repressed the noblest aspirations of the greatest part of the historic race to which we ourselves belong. The best safeguard against secession and disunion and blind submission to ambitious leaders is to be found in the teachings of history as to the fruit of such folly.

W. E. M.

First Steps in General History. A Suggestive Outline. By Arthur Gilman, M.A. New York: Hurd & Houghton. Pp. 385.

This is a manual for the use of students of history,—a brief compend, designed chiefly to present consecutively the eras of history and the peoples who have done what the world cares to remember. It is topical in its plan, and a very good bibliography at the end will enable students who have access to libraries to familiarize themselves with special epochs. It is admirably illustrated with maps in bold outline of the countries and eras of which it treats; as, Ancient Greece, the Roman Empire, Europe at the period of the Crusades, Britain at the time of the Heptarchy. A good index adds to its value. To the teacher who has access to few books, and yet feels the need of an accurate knowledge of the great landmarks of history, it will prove valuable. Every true teacher, as in fact every one who would serve his generation, must sympathize with the words of F. D. Maurice, quoted on the title page: "I feel that I want the light which history gives me—that I can not do without it. The ages are not dead; they can not be. If we listen they will speak to us."

W. E. M.

The Building of a Brain. By Edward H. Clarke, M.D., author of "Sex in Education." Boston: James R. Osgood & Co. 1874. 16mo. Pp. 153.

The positions which Doctor Clarke took in his rather famous "Sex in Education", he reiterates and maintains, with further elucidations, in his recent volume on "The Building of a Brain." The main point at which the argument drives is, that while boys and girls are equal in mental power, and may pursue the same studies with the same thoroughness, they must do their work in different ways. "The only differences between the sexes is sex; but this difference is radical and fundamental, and expresses itself in radical and fundamental differences of organization, that extend from the lowest to the highest forms of life." This central proposition is discussed pretty fully, with much force and clearness, and with a delicacy of diction not always observed in the author's first work. Many wise and practical observations are made, useful alike

to teachers and parents. Every vital statement is supported by illustrative facts, and almost every page gives evidence of the author's sincere endeavor to bring the real truth to the surface. The chapter entitled "A Glimpse at English Brain-Building", is very suggestive, and might profitably be read by most American mothers and daughters.

One is struck, in reading Dr. Clarke's two books, with the unqualified indorsement which these books give to the favorite Yankee theory of *harmonious development.* The student of educational philosophy ever finds himself coming upon one or other of two quite different ideas of human nature and growth,—the one view being that mentioned above, the theory that all the faculties should receive a share of the educator's attention, and that if any faculty be feeble it therefore calls for special nurture; the other, that men are essentially different in mental constitution, and that their training should be adapted to develop their special tendencies to the utmost, ignoring the feeble faculties. The question, Which of these theories is the true one? is of infinite importance; and upon the answer to it much of the value of Doctor Clarke's book depends. W. H. V.

COMPLETE ARITHMETIC. By WM. G. PECK, LL.D., Professor of Mathematics and Astronomy, Columbia College. New York and Chicago: A. S. Barnes & Co.

We have read this book, and find it to be well written, concise in its definitions and explanations, possibly to a fault in some places, and containing no matter but that which every thorough business man should know. One thing we wish were different. The pupil is taught that the ratio of one number to another is the quotient obtained by dividing the *second* by the *first.* We know that this but accords with Dr. Peck's other mathematical writings, and that he has ably defended his position on this point. But still the fact remains which seems to outweigh all else, that nineteen-twentieths (we think we do not overestimate the fact) of the mathematical works extant require for their mastery that the pupil should unlearn this definition and subititute another in its place.

We notice a few blemishes, the most prominent being the statement that the numerator of a fraction may be regarded as the *divisor* and the denominator as the *dividend* of an unexecuted division. Such slips will, of course, be corrected in a second edition, which, we doubt not, the publishers will soon be warranted in issuing. We are glad to notice that the examples of this book are largely practical, to the exclusion of such puzzling questions as too often find place in a work of this grade.

A. G. F.

MY VISIT TO THE SUN; or, *Critical Essays on Physics, Metaphysics, and Ethics.* By LAWRENCE S. BENSON, Author of Benson's Geometry. "Cœli enarrant Gloriam Dei." Vol. I—Physics. Electrotyped Edition. New York: James S. Burnton, 149 Grand Street. 1874.

Is it not tautological to speak of "emotions of grandeur *and sublimity?*" Is it elegant to write, "My faculties * * * became, *as it were,* newly developed?" On page 19, we find the expression: "They are not

studded so thickly *like* they appear from the earth." On page 20 we read: "*What on earth* is called animal life seems possessed by the whole universe. List! I hear the buzzing, like a bee-hive; is it possible that the movements of the bodies produce this peculiar sound." *What on earth*, strikes us as rather ambiguous; and *List! I hear the buzzing*, is not unlike the graduating speech of a school-girl. On page 27, our author is fearful of tossing upon a sea of "fanaticism, *rudderless*, *compassless*, and *pilotless*." On page 23, he walks "so *effortless*, that I seem borne rather than moving by my own volition." His composition is not so *effortless*. Meeting the "Man of the Sun", Mr. Benson says to him: "I am *considerably interested* to know *why on earth* my sensation of light is associated, etc." That *why on earth* again! We have room for only one other extract, but that one is full of "grandeur and sublimity": "The air around me is *filled* with *fragrance* of the most *delightsome sweetness*, which *impregnates every thing*, and thus *perfume* of the most *grateful odor* becomes *prolific* and *ubiquitous*." There!! Such are specimens of the warp and woof of "Critical Essays, on Physics, Metaphysics, and Ethics." The italics are ours. W. H. V.

—— We have received twelve of the famous Lancaster School Mottoes, which we have before commended as excellent. They are printed on tinted card board in a bold yet attractive style. The Mottoes are well selected. See advertisement.

—— Messrs. S. C. Griggs & Co., Chicago, advertise in this number "Old-Time Pictures" and "Getting On in the World"—two admirable books for the holidays—and other excellent books.

—— We will furnish *Littell's Living Age* and this journal one year, postage prepaid, for $8.00.

NEW BOOKS RECEIVED.

Outlines of Astronomy. By Arthur Searle, A.M. Boston: Ginn Brothers. Price, $2.00

The Elements of Physics. By Sidney A. Norton, A.M. Cincinnati and New York: Wilson, Hinkle & Co. Wholesale price, $9.80 per dozen.

A Practical and Critical Grammar of the English Language. By Noble Butler. Louisville, Ky.: John P. Morton & Co. Retail Price, $1.00.

Manual of Practical Arithmetic. By William G. Peck, LL.D. New York and Chicago: A. S. Barnes & Co. Price, 50 cts., sent by mail, postpaid.

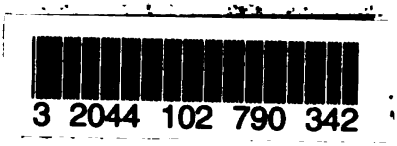
Graded Singers.. Books No. I, II, III, and IV. By O. Blackman and E. E. Whittemore. Cincinnati: John Church & Co. Chicago: Geo. F. Root & Sons. Prices, 25 c., 50 c., 75 c., and $1.00.

Annual Report of the School Committee of the City of Providence. 1874. Rev. Daniel Leach, Supt.

Annual Report of the Board of Education of the Nashville City Schools. 1873–4. S. Y. Caldwell, Supt.

Biennial Report of the Supt. of Public Instruction of the State of Iowa. 1874. Alonzo Abernethy, Supt.

Circular of Information of the Bureau of Education. No. 3. John Eaton, Jr., Commissioner.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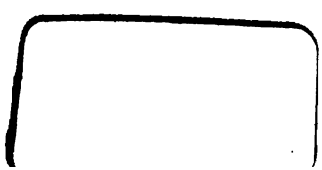

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